

addition the yellow of the throat is very much duller and the white ring round the eye somewhat narrower.

From *Z. palpebrosa*, which also occurs in the Peninsula, the species is at once differentiated by the yellow mesial streak on the abdomen and the absence of a yellowish-orange tinge on the forehead and in front of the eye.

III.—*List of Birds collected in Argentina, Paraguay, Bolivia, and Southern Brazil, with Field-notes.* By CLAUDE H. B. GRANT, M.B.O.U.—Part I. PASSERES.

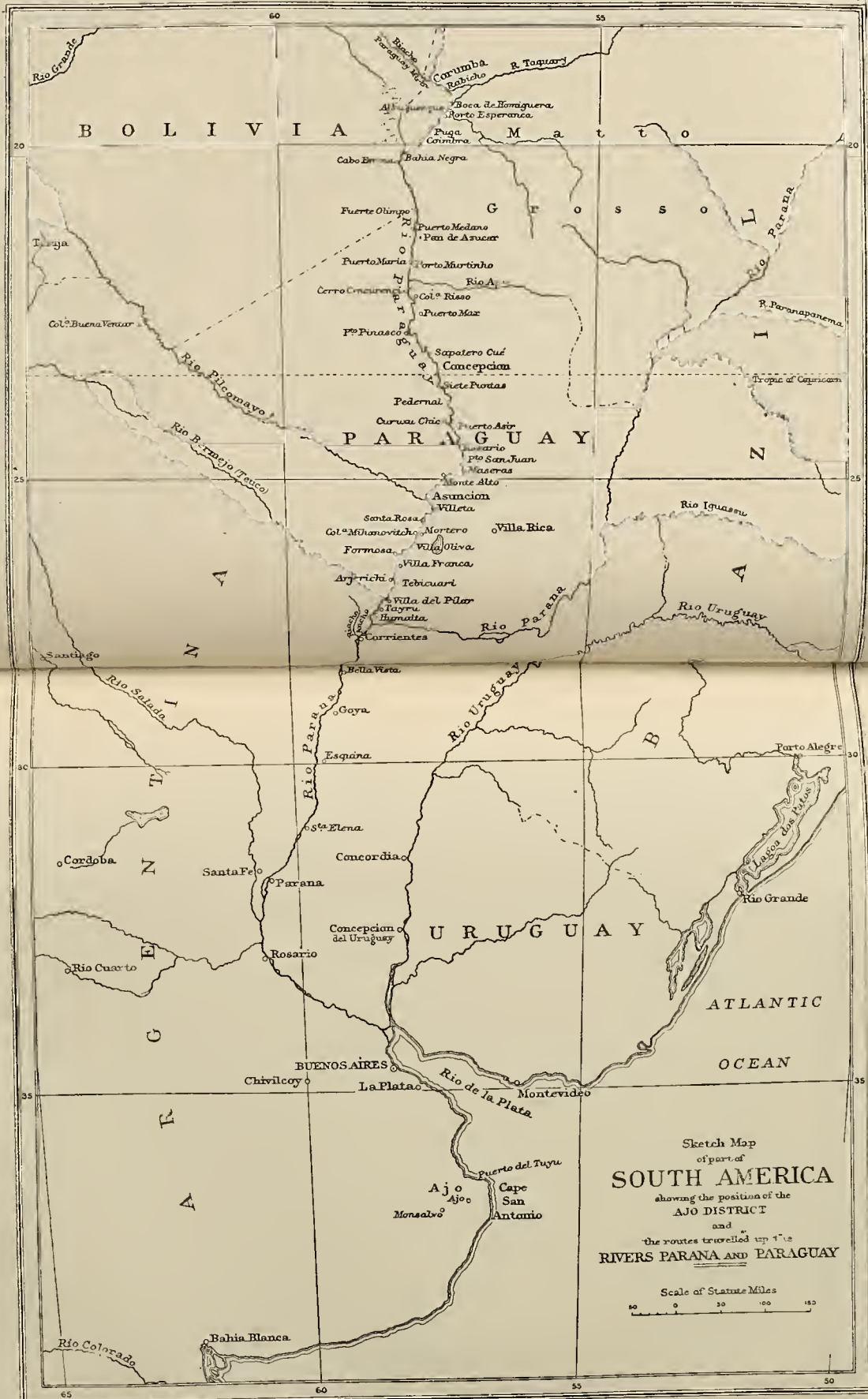
(Plate II.)

THE collections on which this paper is based were made in various localities in Argentina, Paraguay, and Southern Brazil (see map, Plate II.). At Los Ynglases I collected in the Ajó district, some fifty miles to the south of Buenos Aires, between September 1908 and June 1909, and from December 11th, 1909, to March 11th, 1910, on behalf of the British Museum and Mr. Ernest Gibson, F.Z.S. I also visited the following localities in Northern Argentina, Paraguay, and the Matto Grosso district of Brazil (where I accompanied Mr. G. W. Tudor in his steam-launch 'Leda,' on an expedition up the Rio Paraná and Rio Paraguay), between the end of July and the middle of November 1909, when we proceeded as far north as Corumba in Matto Grosso :—

Northern Argentina.—Rosario, Santa Elena, Esquina, Goya, Bella Vista, Riacho Ancho, Colonia Mihanovitch.

Paraguay.—Humaita, Tayru, Villa del Pilar, Tebicuari, Arjerichi, Villa Franca, Villa Oliva, Mortero, Santa Rosa, Villeta, Monte Alto, Maseras, Puerto San Juan, Puerto Asir, Curuzu Chica, Sapatero Cué, Puerto Pinasco, Colonia Risso, Cerro Concurencia, Puerto Maria, Puerto Medano, Fuerte Olimpo, Cabo Emma, and Bahia Negra.

Bolivia.—The few miles of the river-bank that have now



been conceded to Bolivia are between Bahia Negra and the fort of Coimbrá.

S. Brazil.—Rio Apa, Porto Martinho, Pan de Azucar, Coimbrá, Puga, Porto Esperança, Albuquerque, Boca de Homiguera, Rabicho, Riacho Paraguay, Mirin, Corumba.

The Ajó district is open grass camp or pampa, with a few Tala woods. It is intersected by great swamps which water the district, and, as might be expected, is rich in water-haunting birds. It is also a very interesting locality, inasmuch as it is about the southern limit of many woodland species common at Buenos Aires and to the northward, and is about the northern limit of many Patagonian species that migrate northward in the winter months.

On the Rio Paraná and Rio Paraguay the country is well wooded for the whole of the course traversed, especially after passing Corrientes, and at many of the ports there are large factories for the cutting of wood. Large lagunas and swamps are scattered over the country adjacent to the rivers. Until the Rio Apa is reached no hills are seen except for a few around Asuncion, but from the Rio Apa to Corumba chains of low hills covered with bush are met with. The passes through them by the Pan de Azucar (a conical hill of some 1600 feet above sea-level) are extremely pretty, and in many parts are covered with palms. Some of the most interesting sights on this trip were the numbers of colonies of breeding Terns, and I never cease to regret that, owing to the loss of my negatives, I was unable to get photographs of them.

In working out my collections I have had access to a series of birds and eggs made by Miss I. G. Runnacles at Los Ynglases in the Ajó district. I have included many of these in this paper, especially where a species is not represented in my series, so as to make the list as complete as possible. I have to thank Miss Runnacles for her kindness in allowing me to do this, and for the use of her notes. In all about two hundred species of birds are represented.

In every case I have given references to the 'Catalogue of
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Birds in the British Museum' and to Sclater and Hudson's 'Argentine Ornithology,' while I have also cited several recent publications and papers.

The 'Catalogue of Birds in the British Museum' is quoted as "Cat. B." and Sclater and Hudson's 'Argentine Ornithology' as "Arg. Orn."

I have to tender my best thanks to Mr. Ogilvie-Grant for his kindness in facilitating my access to the collection of the British Museum, and to Mr. Charles Chubb of the same Institution for much valuable help.

1. *TURDUS LEUCOMELAS.*

Turdus leucomelas Seebohm, Cat. B. v. p. 213; Arg. Orn. i. p. 1.

Turdus amaurochalinus Hellmayr, J. f. O. 1902, p. 58.

a. ♂ ad. Villa Franca, Paraguay. Aug. 10, 1909.

b. ♀ ad. Porto Esperança, Brazil. Sept. 25, 1909.

Iris hazel; bill yellowish brown; legs and toes brownish horn-coloured.

The September specimen is very worn and bedraggled.

2. *TURDUS RUFIVENTRIS.*

Merula rufiventer Seebohm, Cat. B. v. p. 222.

Turdus rufiventrís Arg. Orn. i. p. 3.

a, b. ♂ ad. Los Ynglases, Ajó. Sept. 10-14, 1908.

c, d, e, f, g. ♂ ♀ ad. " " Oct. 6-14, 1908.

h, i, j. ♂ ♀ ad. & yg. " " Nov. 6-24, 1908.

k. ♂ young. " " Jan. 5, 1909.

l. ♀ ad. " " March 15, 1909.

m. ♂ young. " " Feb. 14, 1910.

n, o. ♀ ad. Riacho Ancho, N. Argentine. July 30-31, 1909.

p. ♂ ad. Arjerichi, Paraguay. Aug. 9, 1909.

q. ♂ ad. Sapatero Cué, Paraguay. Sept. 3, 1909.

r. ♀ ad. Near Villa Franca, Paraguay. Nov. 6, 1909.

s. ♂ ad. Near Santa Elena, N. Argentine. Nov. 15, 1909.

Ad. Irides hazel; eyelid lemon-chrome; bill pale olive-green; legs and toes purplish brown.

Young. Bill paler than in the adult and yellow at the gape; legs and toes more ashy.

The October and November birds are worn, and the March bird has finished its moult.

The Red-bellied Thrush was observed everywhere, and has a lively and pretty song. On the Estancias at Ajó it unfortunately shews a great liking for the fruit, especially grapes, and is therefore somewhat of a nuisance.

The nest is composed of grass or moss &c., lined with mud and then with fine grass, and the full clutch of eggs is four, though three is the most usual number found.

3. MIMUS MODULATOR.

Mimus modulator Sharpe, Cat. B. vi. p. 347; Arg. Orn. i. p. 5.

a, b, c. ♂ ♀ ad. Los Ynglases, Ajó. Oct. 12-20, 1908.

d, e, f, g. ♂ ♀ ad. & yg. Los Ynglases, Ajó. Nov. 6-9, 1908.

h, i. ♂ ♀ ad. Los Ynglases, Ajó. Jan. 7, 1909.

j. ♀ young. „ „ Jan. 21, 1909.

k. ♂ ad. „ „ Dec. 29, 1909.

l, m. ♂ ad. Nr. Santa Elena, N. Argentine. Nov. 15, 1909.

Ad. Irides grey; bill black, livid at base of lower mandible; legs and toes almost black.

Young. Irides grey; bill, legs, and toes greyish; gape yellow.

All the adults, especially the December birds, are shewing signs of wear and fading.

The two from Santa Elena are darker above than the southern birds, but are very much worn and the edges to the feathers are almost totally abraded.

The young bird differs from the adult in having "the mantle, rump, and the edges of the secundaries and wing-coverts brown; below buffy white spotted and streaked with blackish; throat as in the adult."

A common resident species in the Ajó district, but by no means often observed on the river expedition.

The nest is placed in a bush or low tree, often in a very exposed situation; it is composed of thorny twigs and lined with rootlets and hair.

4. *MIMUS TRIURUS*.

Mimus triurus Sharpe, Cat. B. vi. p. 342; Arg. Orn. i. p. 8, pl. i.

a. ♂ ad. Monte Alto, Paraguay. Aug. 25, 1909.

b. ♂ ad. Colonia Risso, ,, Sept. 8, 1909.

Irides *olive-green*; bill blackish horn-coloured, pearly at base of lower mandible; legs and toes dull black.

5. *POLIOPTILA DUMICOLA*.

Polioptila dumicola Sharpe, Cat. B. x. p. 444; Arg. Orn. i. p. 12.

a. ♀ ad. Los Ynglases, Ajó. Sept. 27, 1908.

b. ♂ ad. ,, ,, Oct. 31, 1908.

c. ♂ young. ,, ,, Feb. 15, 1909.

d, e. ♂ ad. & ♀ yg. ,, ,, Mar. 4-12, 1909.

f, g. ♂ ♀ ad. ,, ,, June 8, 1909.

h. ♀ ad. Villa Franca, Paraguay. Aug. 10, 1909.

i. ♂ ad. Cabo Emma, ,, Oct. 20, 1909.

♂. Irides hazel; bill slate-coloured, darker at tip; legs and toes slate-coloured.

♀. Irides hazel; bill, legs, and toes blue-slate-coloured.

♂ juv. Soft parts as in adult; gape yellow.

The October birds are rather faded compared with those of June and August, and the March adult is much worn and faded, and is starting to moult.

The June male is in complete new dress, except for the tail.

The young female taken in March has only blackish tips to the ear-coverts and is moulting.

The young male is as follows:—"Similar to adult female except forehead and ear-coverts grey, the latter faintly bordered with blackish; and the whole of the upper parts more grey than blue."

This exceedingly graceful and pretty species is by no means common in the montes in the Ajó district, but is resident, being observed throughout the twelve months.

It is seen singly, in pairs, or occasionally three or four together, creeping about among the upper branches of the Tala trees after the manner of our Long-tailed Titmouse (*Acredula caudata*), and its note is very similar to that of the Blue Titmouse (*Parus cœruleus*). Its flight as it goes from tree to tree is dipping and graceful.

There is little doubt that it breeds in this district, though I did not find the nest or even see the birds carrying building material; but towards the close of the summer of 1908-1909. I saw one or two parties of old and young.

6. DONACOBIVS ATRICAPILLUS.

Donacobius atricapillus Sharpe, Cat. B. vi. p. 364; Arg. Orn. i. p. 13.

a. ♂? ad. Boca de Homiguera, Brazil. Oct. 9, 1909.

Irides rich yellow; bill black, ashy on under side of lower mandible; bare skin on side of neck lemon-chrome; legs and toes dark ashy.

Many individuals were observed frequenting the long grass at the edges of the swamps.

7. TROGLODYTES HORNENSIS.

Troglodytes hornensis Sharpe, Cat. B. vi. p. 257.

Troglodytes musculus hornensis Oberhols. Proc. U.S. Nat. Mus. xxvii. p. 203.

a. ♂ ad. Los Ynglases, Ajó. Sept. 16, 1908.

b, c, d. ♂ ♀ ad. " " Oct. 18-26, 1908.

e, f. ♂ ♀ ad. & yg. " " Jan. 21-25, 1909.

g. ♂ ad. " " Feb. 3, 1909.

h. ♀ ad. " " Mar. 10, 1909.

i. ? young. " " Jan. 7, 1910.

j. ♀ young. " " Feb. 2, 1910.

Ad. Irides hazel; bill dark brown, lower mandible livid flesh-coloured; gape yellow; legs and toes pale brown.

The adult specimens vary slightly individually, but there

is great similarity in the general tone. When the plumage becomes worn the birds have a much more barred appearance on the upper parts.

Both the February and March adults are moulting.

The young bird differs from the adult as follows: "Above nearer blackish brown, finely and regularly barred; below, from chin to vent crossed by narrow wavy lines; more or less distinct individually."

A common species and remarkably tame and confiding; in call, actions, and habits it resembles the European Wren, but carries the tail horizontally.

It usually nests in holes or crevices in the trees, the nest being composed of a few sticks and lined with feathers; eight eggs appear to be the full clutch.

8. *TROGLODYTES MUSCULUS*.

Troglodytes musculus Sharpe, Cat. B. vi. p. 255; Arg. Orn. i. p. 13.

Troglodytes musculus musculus Oberhols. Proc. U.S. Nat. Mus. xxvii. p. 202.

a, b. ♂ ♀ ad. Riacho Ancho, N. Argentine. July 31, 1909.

c. ♂ ad. Arjerichi, Paraguay. Aug. 9, 1909.

d. ♂ ad. Villa Franca, ,, Aug. 10, 1909.

e. ♂ ad. Colonia Risso, ,, Sept. 8, 1909.

f. ♂ ad. Cabo Emma, ,, Oct. 20, 1909.

In habits and actions similar to *T. hornensis*.

9. *ANTHUS CORRENDERA*.

Anthus correndera Sharpe, Cat. B. x. p. 610; Arg. Orn. i. p. 17.

a. ♂ ad. Los Ynglases, Ajó. Sept. 19, 1908.

b. ♀ ad. ,, ,, Oct. 30, 1908.

c, d, e, f, g, h. ♂ ♀ ad. Los Ynglases, Ajó. Nov. 9-30, 1908.

i, j. ♂ ♀ young & ad. Los Ynglases, Ajó. Dec. 11-26, 1908.

k. ♀ ad. Los Ynglases, Ajó. Jan. 20, 1909.

l. ♀ young. ,, ,, Feb. 21, 1909.

m, n. ♂ ♀ ad. Los Ynglases, Ajó. April 28, 1909.

o, p. ♂ ♀ ad. „ „ Dec. 13, 1909.

q. ♀ ad. „ „ Jan. 6, 1910.

Irides hazel; bill dark brown, paler at base of the lower mandible; legs and toes pale brown.

The November adults are shewing signs of wear, and the December young birds are much worn.

The April birds have completed the moult and are in full new dress.

The young bird taken in February is moulting into the adult dress.

The commoner of the two Pipits found in the Ajó district, where it is exceedingly plentiful, spending most of its time on the ground, but occasionally sitting on the tops of the plants or on the wire fences.

The nest is placed on the ground under a tuft of grass, often in the footprint of a horse or cow, and is composed of grass lined with hair. Four eggs form the full clutch, though three is the usual number.

10. ANTHUS FURCATUS.

Anthus furcatus Sharpe, Cat. B. x. p. 605; Arg. Orn. i. p. 19.

a. ♀ ad. Los Ynglases, Ajó. Nov. 24, 1908.

b. ♀ ad. „ „ Dec. 14, 1908.

c, d. ♂ ♀ ad. „ „ April 16, 1909.

e. ♀ ad. „ „ Dec. 13, 1909.

The November and December birds are much worn, and the April examples have completed the moult and are in full new dress, shewing a deeper tinge of buff on the chest.

Nearly as plentiful as *A. correndera* in the Ajó district, and can be always distinguished in life from that species by the lighter and more uniform colour of the back.

A. furcatus resembles *A. correndera* in habits and manner of nesting. Three eggs appear to form the complete clutch.

11. PARULA PITIAYUMI.

Parula pitiayumi Sharpe, Cat. B. x. p. 259, pl. xi. fig. 1; Arg. Orn. i. p. 20.

a. ♀ ad. Los Ynglases, Ajó. Sept. 12, 1908.

- b, c, d.* ♂ ♀ ad. Los Ynglases, Ajó. June 1-8, 1909.
e, f. ♂ ad. Riacho Ancho, N. Argentine. July 31, 1909.
g. ♀ ? ad. Arjerichi, Paraguay. Aug. 9, 1909.
h. ♀ ad. Villa Oliva, ,, Aug. 11, 1909.
i. ♂ ad. Santa Rosa, ,, Aug. 14, 1909.

Irides hazel ; bill and upper mandible black, lower pale yellow-brown ; legs and toes brown.

This is quite the rarest woodland bird in the Ajó district, where it is apparently only a winter visitor, arriving in the autumn and leaving again in the spring.

I shot one on September 12th, soon after my arrival there in 1908, and more were observed afterwards till March or April of 1909. Miss Runnacles noted them in every month throughout that winter.

This is a dainty and lively little bird, having much the habits and actions of a *Zosterops*, while the note is loud and shrill and not unlike the alarm-note of *Troglodytes hornensis*. It was very plentiful in the woods of the Northern Argentine and Paraguay.

12. GEOTHYLPIS VELATA.

Geothlypis velata Sharpe, Cat. B. x. p. 363, pl. ix. fig. 5 ; Arg. Orn. i. p. 20.

Geothlypis cucullata Richmond, Auk, xvii. p. 179 (1900).

a, b. ♀ ad. Puerto Pinasco, Paraguay. Sept. 17, 1909.

c. ♀ ad. Curuzu Chica, ,, Oct. 29, 1909.

d. ♂ ad. Bella Vista, N. Argentine. Nov. 12, 1909.

♂. Irides hazel ; bill black, lower mandible fleshy ; legs and toes pale brown.

♀. Similar to the male, except that the upper mandible is dark brown.

13. BASILEUTERUS AURICAPILLUS.

Basileuterus auricapillus Sharpe, Cat. B. x. p. 393 ; Arg. Orn. i. p. 21.

a. ♂ ad. Riacho Ancho, N. Argentine. July 31, 1909

Irides hazel ; bill brown ; legs and toes amber-yellow.

14. *BASILEUTERUS FLAVEOLUS*.*Basileuterus flaveolus*, Sharpe, Cat. B. x. p. 380.

a. ♂ ad. Sapatero Cué, Paraguay. Sept. 3, 1909.

Irides hazel; bill dark brown; legs and toes yellow-brown.

15. *VIREOSYLVIA CHIVI*.*Vireo chivi* Gadow, Cat. B. viii. p. 295.*Vireosylvia chivi* Arg. Orn. i. p. 22.

a. ♂ ad. Near Villa Franca, Paraguay. Nov. 6, 1909.

b. ♂ ad. Bella Vista, N. Argentine. Nov. 12, 1909.

c, d. ♂ ad. Near Goya, ,, Nov. 13, 1909.

e. ♀ ad. Near Santa Elena, ,, Nov. 15, 1909.

Irides hazel; bill, legs, and toes slate-coloured.

This bird has much the appearance and action of our Wood-Warblers.

16. *HYLOPHILUS PÆCILOTIS*.*Hylophilus pæcilotis* Gadow, Cat. B. viii. p. 308; Arg. Orn. i. p. 23.

a. ♀. Riacho Paraguay, Mirin, Brazil. Oct. 3, 1909.

b. ♂. Rabicho, Brazil. Oct. 8, 1909.

Irides reddish brown; bill, legs, and toes very pale brown.

17. *CYCLORHIS VIRIDIS*.*Cyclorhis viridis* Gadow, Cat. B. viii. p. 318.*Cyclorhis altirostris* Arg. Orn. i. p. 24, pl. iii. fig. 2.

a. ♀ ad. Puerto Pinasco, Paraguay. Sept. 7, 1909.

b. ♀ ad. Pan de Azucar, Brazil. Sept. 20, 1909.

Irides yellow; bill and upper mandible pale brown, lower base livid; legs and toes pale slaty grey.

18. *PROGNE FURCATA*.*Progne furcata* Sharpe, Cat. B. x. p. 175; Arg. Orn. i. p. 24.

a. ♂ ad. Los Ynglases, Ajó. Jan. 3, 1909.

Irides hazel; bill black; legs and toes brown.

A rare visitor to the Ajó district, the specimen obtained being the only one observed. This remained for several

weeks with *P. domestica*, which was breeding in the out-buildings, and, fearing that it would leave, I at last shot it.

19. PROGNE DOMESTICA.

Progne domestica Sharpe, Cat. B. x. p. 177.

Progne chalybea Arg. Orn. i. p. 25.

a. ♀ young. Los Ynglases, Ajó. Jan. 14, 1909.

b. ♀ young. " " Feb. 7, 1909.

c. ♀ ad. " " March 2, 1909.

d. ♂ ad. Colonia Mihanovitch, N. Argentine. Aug. 13, 1909.

The March bird is moulting.

A summer visitor to the Ajó district, and breeding in the outbuildings, the nest being placed on a horizontal rafter or support. It is composed of mud and grass and lined with feathers: five or six eggs form the complete clutch.

The young differ from the adult, as in *P. chalybea*.

20. PROGNE TAPERA.

Progne tapera Sharpe, Cat. B. x. p. 180; Arg. Orn. i. p. 26.

a. ♂ ad. Los Ynglases, Ajó. Oct. 20, 1908.

b. ♀ ad. " " Jan. 25, 1909.

c, d, e. ♀ ad. " " Feb. 4-16, 1909.

f, g. ♂ ad. Rabicho, Brazil. Oct. 8, 1909.

h, i. ♂ ♀ ad. Nr. Villa Pilar, Paraguay. Nov. 7, 1909.

k. ♂. Nr. Esquina, N. Argentine. Nov. 14, 1909.

Irides hazel; bill, legs, and toes sooty brown.

The February specimens are rather worn, but are not moulting, and all appear to be fully adult.

This arrives later than any of the other Swallows in the Ajó district, and does not leave till winter is well in. It occupies the nests of *Furnarius rufus* after the latter has left them, and its own nest is composed of grass and feathers.

On the river expedition a few were seen between Puerto Pinasco and Puerto Maria on the 7th of September, and a pair

were observed carrying grass and feathers to an old Oven-bird's nest on the 8th of October at Boca de Homiguera.

21. PETROCHELIDON PYRRHONOTA.

Petrochelidon pyrrhonota Sharpe, Cat. B. x. p. 201; Arg. Orn. i. p. 30.

a, b, c. ♂. Luiconia, Ajó. March 2, 1909.

Irides dark brown; bill black; legs and toes sooty brown.

All the specimens are just completing the moult.

Numbers of this Swallow were seen at Luiconia on March 2nd, all migrating northwards; and again on Feb. 23, 1910, several were observed on the coast going westwards.

22. TACHYGINETA LEUCORRHOA.

Tachycineta leucorrhous Sharpe, Cat. B. x. p. 114.

Tachycineta leucorrhoa Arg. Orn. i. p. 30.

a. ♂ ad. Los Ynglases, Ajó. Oct. 20, 1908.

b, c, d, e, f. ♂ ♀ yg. " " Mar. 3, 1909.

g. ♀ ad. " " Dec. 21, 1909.

The young differ from the adults in being duller above and having white edges to the inner secondaries.

The White-rumped Swallow is a summer visitor to the Ajó district, appearing about the end of July and leaving again about March.

It is generally observed hawking backwards and forwards over the open camp close above the surface of the ground, and is extremely fond of circling round the rider's horse in order to catch the insects either disturbed by the animal or those that often follow.

It breeds both under the roofs of houses and in holes in the trees, and from the latter I have taken most of my nests.

The nest is made of grass warmly and thickly lined with feathers, and five eggs apparently make the full clutch.

23. TACHYGINETA MEYENI.

Tachycineta meyeri Sharpe, Cat. B. x. p. 116.

a. ♂ ad. Los Ynglases, Ajó. May 9, 1909.

24. *ATTICORA CYANOLEUCA.*

Atticora cyanoleuca Sharpe, Cat. B. x. p. 186; Arg. Orn.

i. p. 33.

a, b. ♂ ad. & young. Los Ynglases, Ajó. Feb. 20, 1910.

Irides dark brown; bill black; legs and toes purplish brown.

A few were seen on the date the specimens were shot, but the bird does not, I think, now breed in the Ajó district, or if so very sparingly.

25. *ATTICORA FUCATA.*

Atticora fucata Sharpe, Cat. B. x. p. 188; Arg. Orn. i.

p. 35.

a. Ad. Mortero, Paraguay. Aug. 13, 1909.

Irides brown; bill, legs, and toes horn-brown.

26. *STELGIDOPTERYX RUFICOLLIS.*

Stelgidopteryx ruficollis Sharpe, Cat. B. x. p. 208; Arg.

Orn. i. p. 36.

a. ♂ ad. Rabicho, Brazil. Oct. 8, 1909.

b. ♂ ad. Colonia Mihanovitch, N. Argentine. Nov. 5, 1909.

27. *EUPHONIA CHLOROTICA.*

Euphonia chlorotica ScL. Cat. B. xi. p. 64; Arg. Orn. i.

p. 37.

Euphonia serrirostris Chubb, Ibis, 1910, p. 621.

a. ♂ ad. Curuzu Chica, Paraguay. Oct. 29, 1909.

Iris hazel; bill, legs, and toes deep slate-coloured.

28. *TANAGRA SAYACA.*

Tanagra sayaca ScL. Cat. B. xi. p. 158; Arg. Orn. i. p. 39.

a. ♂ ad. Near Goya, N. Argentina. Nov. 12, 1909.

b. ♀ ad. Near Santa Elena, „ Nov. 15, 1909.

c. ♀ ad. Monte Alto, Paraguay. Aug. 25, 1909.

Iris hazel; bill, feet, and toes pale blue-slate-coloured; tip of upper mandible dark.

d, e. ♀ ad. Cabo Emma, Alto Paraguay. Oct. 20, 1909.

f. ♀ ad. Puerto Maria, „ Oct. 24, 1909.

There is also an adult male in Miss Runnacles' collection taken at Ajó on the 12th of August, 1909, to which district it is a rare visitant.

29. TANAGRA BONARIENSIS.

Tanagra bonariensis Scl. Cat. B. xi. p. 164; Arg. Orn. i. p. 39.

a. ♀ ad.	Los Ynglases, Ajó.	Sept. 12, 1908.
b, c. ♂ ad.	„ „	Sept. 15, 1908.
d. ♀ ad.	„ „	Sept. 21, 1908.
e. ♀ ad.	„ „	Feb. 1, 1909.
f, g, h. ♂ ♀ juv.	„ „	Feb. 15, 18, 1909.
i, k. ♂ ad. et imm.	„ „	May 5, 1909.
l. ♀ juv.	„ „	May 6, 1909.
m, n. ♂ ♀ imm.	„ „	May 12, 1909.
o, p. ♀ ad.	„ „	Jan. 7, 1910.
q. ♂ ad.	„ „	Jan. 9, 1910.
r, s. ♂ ad.	„ „	Jan. 10, 1910.

The young male is similar to the adult female, but not so sandy rufous below.

A common bird at Ajó, where it does not a little damage to fruit &c. in the gardens.

I have been unable to decide whether it breeds in this district or not; but I think there is little doubt that it does breed here, as not only have I shot young birds which had not long left the nest, but in December 1908 Miss Runnacles secured for me several females that had undoubtedly been sitting, and again in January 1910 I shot females that had been sitting recently.

It also appears to be subject to partial migration, as the following note supplied to me by Miss Runnacles shews:—

“During August and September, 1909, the ‘Siete Colores’ was extremely numerous, but suddenly disappeared about the first week in October, after which not one was to be seen, and they did not put in an appearance until near the beginning of December, when a few females and young birds were observed.”—*I. G. R.*

30. *RAMPHOCÆLUS ATROSERICEUS.*

Rhynchocælus atrosericeus Scl. Cat. B. xi. p. 175.

a. ♂ ad. Pasage de Nigre, Alto Paraguay. Sept. 29, 1909.

Iris dark crimson; bill black, bluish white on lower mandible; legs and feet sooty brown.

b. ♂ ad. Off Rabicho, Alto Paraguay. Oct. 10, 1909.

31. *PYRANGA AZARÆ.*

Pyrranga azaræ Scl. Cat. B. xi. p. 186; Arg. Orn. i. p. 40.

a. ♂ imm. Colonia Mihanovitch, N. Argentine. Aug. 13, 1909.

Iris hazel; bill, upper mandible black, lower mandible pale slate-blue; legs and toes slate-coloured.

b. ♂ ad. Santa Elena, Northern Argentine. Nov. 15, 1909.

32. *TACHYPHONUS MELALEUCUS.*

Tachyphonus melaleucus Scl. Cat. B. xi. p. 206.

Tachyphonus rufus Sharpe, Hand-l. B. v. p. 392 (1909).

a. ♂ ad. Riacho Ancho, N. Argentine. Aug. 1, 1909.

Iris brown; bill black, slate-coloured at base of lower mandible; legs and toes black.

33. *ARREMON POLIONOTUS.*

Arremon polionotus Scl. Cat. B. xi. p. 278 (1886).

a. ♂ ad. Riacho Ancho, N. Argentine. July 31, 1909.

Iris hazel; bill yellow, culmen black; legs and toes purplish horn-coloured.

b. ♂ ad. Villa Franca, Paraguay. Aug. 10, 1909.

34. *SALTATOR CÆRULESCENS.*

Saltator cærulescens Scl. Cat. B. xi. p. 290; Arg. Orn. i. p. 42.

a. ♂ ad. Puerto Pinasco, Alto Paraguay. Sept. 7, 1909.

b. ♀ ad. " " " Sept. 29, 1909.

c. ♂ ad. Coimbrá. Oct. 15, 1909.

d. ♂ ad. Colonia Mihanovitch, N. Argentine. Nov. 5, 1909.

35. *SALTATOR SIMILIS.*

Saltator similis Scl. Cat. B. xi. p. 287; Arg. Orn. i. p. 41.

a. ♂ ad. Colonia, N. Argentine. Aug. 12, 1909.

Iris hazel; bill blackish brown, gape yellow; legs and toes purplish brown.

b. ♂ ad. Pan de Azucar, Brazil. Sept. 19, 1909.

36. *SALTATOR AURANTIROSTRIS.*

Saltator aurantirostris Scl. Cat. B. xi. p. 292; Arg. Orn. i. p. 42.

a, b. ♂ ad. Santa Elena, Northern Argentine. Nov. 15, 1909.

Iris brown; bill rich yellow-ochre or gamboge; legs and toes purplish brown.

c. ♀ juv. Iris greyish brown; bill olive-brown, yellowish at cutting-edges and gape; legs and toes bluish ash-coloured.

37. *SPOROPHILA LEUCOPTERA.*

Sporophila leucoptera Hellm. Verh. z.-b. Ges. Wien, liv. p. 536; Sharpe, Hand-l. v. p. 208.

a. ♂ ad. Boca de Homiguera, Alto Paraguay. Oct. 9, 1909.

Iris hazel; bill brown; legs and toes dark purple.

b. ♂ ad. Colonia Mihanovitch, N. Argentine. Nov. 5, 1909.

38. *SPOROPHILA MELANOCEPHALA.*

Spermophilus melanocephalus Sharpe, Cat. B. xii. p. 118; Arg. Orn. i. p. 45.

a. ♂ young. Monte Alto, Paraguay. Aug. 25, 1909.

Iris hazel; bill, legs, and toes dark olive-brown.

b. ♂; c, d. ♀ ad. Desaguadero, Paraguay. Aug. 29, 1909.

Iris hazel; bill dark olive-brown; legs and toes brown.

39. *SPOROPHILA CÆRULESCENS.*

Spermophila cærulescens Sharpe, Cat. B. xii. p. 126; Arg. Orn. i. p. 46.

a, b, c. ♂ juv. Los Ynglases, Ajó. April 19, 1909.

Iris dark brown; bill horn-coloured, yellowish at gape and base of under mandible; legs and toes black.

d, e. ♂ ♀ ad. Los Ynglases, Ajó. Jan. 1910.

Iris hazel; bill greenish pearl; legs and toes blackish.

f. ♀ ad. Colonia Mihanovitch, N. Argentine. Nov. 5, 1909.

g. ♂ ad. Near Santa Elena, N. Argentine. Nov. 15, 1909.

Iris hazel; bill pearly grey, yellowish on the cutting-edges; legs and toes purplish brown.

During the autumn of 1909 a few of these little Finches frequented the garden at Los Ynglases, but I did not see any old males.

Later in 1909 and in the beginning of 1910 they were again seen, this time both old males and females, and two nests were found in the garden.

40. *PAROARIA CUCULLATA.*

Paroaria cucullata Sharpe, Cat. B. xii. p. 809, pl. xvi. fig. 1; Arg. Orn. i. p. 47.

a. ♂ ad. Los Ynglases, Ajó. Sept. 12, 1908.

Iris hazel; bill livid; legs and toes sooty black.

b. ♀ juv. Los Ynglases, Ajó. Nov. 12, 1908.

c. ♀ ad.; *d, e.* ♂ imm. Los Ynglases, Ajó. Jan. 1909.

f. ♂ ad; *g, h.* ♀ ad. et imm. Los Ynglases, Ajó. Feb. 1909.

i. ♀ juv. Los Ynglases, Ajó. March 5, 1909.

j, k. ♂ ♀ juv. Bahia Negra, Alto Paraguay. Oct. 19, 1909.

This is the only Cardinal found in the Ajó district, where it is quite plentiful; but very few were observed on the river expedition. The only records that I have of seeing it are at Puerto Maria on Sept. 13th and 16th and at Puerto Olimpo on the 21st of the same month. Everywhere it is quite tame, and it makes a delightful cage-bird.

The nest is a thin open structure of hair and can be seen through from below, while two eggs is the most I have taken, though this cannot be the full clutch.

The eggs seem to vary somewhat, the two in my collection being quite different from the two in Miss Runnacles' collection.

41. *PAROARIA CAPITATA*.

Paroaria capitata Sharpe, Cat. B. xii. p. 812, pl. xvi. fig. 5; Arg. Orn. i. p. 48.

a, b. Imm. Riacho Ancho, N. Argentine. July 30, 1909.

Iris hazel; bill deep yellow; legs and toes pale brown.

c. ♂ ad. Puerto Pinasco, Alto Paraguay. Sept. 7, 1909.

d, e, f. ♂ ad. et imm. Sapatero Cué, Paraguay. Sept. 3, 1909.

g, h. ♂ ♀ ad. Esquina, N. Argentine. Nov. 14, 1909.

i. ♀; *k, l.* ♂ ad. Rosario, N. Argentine.

This is the commoner of the two Cardinals, and was observed throughout the river expedition from Corumba to as far south as Rosario in the Argentine. It was mostly seen in small flocks, and frequented the wood and scrub bordering the river or the lagoons.

42. *CORYPHOSPINGUS CRISTATUS*.

Coryphospingus cristatus Sharpe, Cat. B. xii. p. 803; Arg. Orn. i. p. 48.

a. ♂ ad. Colonia Risso, Alto Paraguay. Sept. 8, 1909.

Iris hazel; bill, upper mandible sooty brown, lower mandible livid; legs and toes sooty black.

b. ♂ ad. Curuzu Chica, Paraguay. Oct. 29, 1909.

43. *CORYPHOSPIZA ALBIFRONS*.

Coryphospiza albifrons Sharpe, Cat. B. xii. p. 766.

Donacospiza albifrons Arg. Orn. i. p. 49.

a. ♂ ad. Cape San Antonio, Prov. Buenos Aires. Dec. 17, 1908.

I only observed this little bird in the rough medano country along the coast, and even there it is distinctly uncommon.

In February, 1910, I saw a small party of four or six, which were probably old and young, but I could not secure them.

44. POOSPIZA PERSONATA.

Poospiza personata Sharpe, Cat. B. xii. p. 640.*Poospiza nigrorufa* Arg. Orn. i. p. 49.

- a. ♂ ad. Los Ynglases, Ajó. Sept. 21, 1908.
 b. ♀ ad. „ „ Oct. 3, 1908.
 c, d, e. ♂ ad. „ „ Mar. 13, 1909.
 f. ♂ yg. „ „ Feb. 3, 1910.
 g. ? ad. Bella Vista, N. Argentine. Nov. 12, 1909.

Irides dark brown; bill, legs, and toes sooty black.

The September male is somewhat worn and very dark above.

The March birds are all moulting and their new dress is more olive above than that of the breeding male; one of them is spotted below and is probably not yet fully adult. There is a male in Miss Runnacles' collection, taken at Ajó on September 27th, which is much worn and very pale below and thickly spotted on the under parts except the throat.

The young male is moulting into the chestnut plumage, and most of the new feathers have spots; in its first plumage it was apparently very similar to the adult female.

The specimen from Bella Vista is rather pale and more uniform greyish above than the others: it is undoubtedly a male, though it could not be dissected.

This species is not very plentiful in the Ajó district, where it is resident; it frequents, as a rule, the undergrowth in the woods and gardens.

45. POOSPIZA MELANOLEUCA.

Poospiza melanoleuca Sharpe, Cat. B. xii. p. 638; Arg. Orn. i. p. 52.

- a. ♀ ad. Pan de Azucar, Brazil. Sept. 17, 1909.
 b. ♀ ad. Colonia Mihanovitch, N. Argentine, Nov. 5, 1909.

Irides russet-brown; bill black; legs and toes purplish brown.

46. BRACHYSPIZA PILEATA.

Zonotrichia pileata Sharpe, Cat. B. xii. p. 610; Arg. Orn. i. p. 58.

a, b, c, d. ♂ ♀ ad. Los Ynglases, Ajó. Sept. 10–30, 1908.

e, f, g, h. ♂ ♀ ad. & young. Los Ynglases, Ajó. Oct. 2–31, 1908.

i, j, k, l. ♀ ad. Los Ynglases, Ajó. Nov. 4–13, 1908.

m, n, o. ♂ ♀ ad. Los Ynglases, Ajó. Dec. 9–12, 1908.

p, q, r. ♂ ♀ ad. & young. Los Ynglases, Ajó. Jan. 7–25, 1909.

s. ♂ young. Los Ynglases, Ajó. Feb. 27, 1909.

t. ♀ ad. Villa Franca, Paraguay. Aug. 10, 1909.

u. ♀ ad. Colonia Mihanovitch, N. Argentine. Aug. 12 1909.

v. ♂ ad. Puerto Maria, Paraguay. Oct. 24, 1909.

w. ♂ ad. Bella Vista, N. Argentine. Nov. 12, 1909.

x. ♂ ad. Near Rosario, „ Nov. 17, 1909.

The November and December birds are getting decidedly worn, and one of the two January adults is starting to moult.

The young bird taken in February is moulting into the adult plumage.

The ‘Chingolo’ of the Argentine is very common and resident in the Ajó district. It is very tame.

The nest is placed on the ground or in a hole or hollow in a tree, often at a considerable height from the ground.

47. MYIOSPIZA MANIMBE.

Ammodromus manimbe Sharpe, Cat. B. xii. p. 691.

Myiospiza manimbe Sharpe, Hand-l. B. v. p. 295.

Coturniculus peruanus Arg. Orn. i. p. 60.

a. ♀ ad. Villa Franca, Paraguay. Aug. 10, 1909.

Iris brown; bill bluish flesh-coloured, culmen horn-brown; legs and toes whitish brown.

b. ♂ ad. Villa Oliva, Paraguay. Aug. 11, 1909.

c, d. ♂ ad. Colonia Mihanovitch, N. Argentine. Aug. 12, 1909.

e. ♂ ad. Monte Alto, Paraguay. Aug. 25, 1909.

f. ♀ ad. Colonia Mihanovitch, N. Argentine. Nov. 5, 1909.

48. EMBERNAGRA PLATENSIS.

Embernagra platensis Sharpe, Cat. B. xii. p. 758; Arg. Orn. i. p. 62.

- a. ♀ ad. Los Ynglases, Ajó. Oct. 27, 1908.
 b, c. ♂ ♀ ad. " " Nov. 2, 1908.
 d. ♂ ad. Tuyu, Ajó. Nov. 27, 1908.
 e, f. ♂ ♀ young. Cape San Antonio. Dec. 18-21, 1908.
 g. ♀ ad. Los Ynglases, Ajó. Dec. 29, 1909.
 h. ♀ ad. " " Jan. 21, 1909.
 i. ♂ ad. " " Feb. 16, 1909.
 j. ♂ young. " " April 23, 1909.
 k, l. ♀ ad. Colonia Mihanovitch, N. Argentine. Aug. 12, 1909.
 m, n. ♂ ♀ ad. Near Villa Pilar, Paraguay. Nov. 7, 1909.
 o, p, q. ♂ ♀ ad. Bella Vista, N. Argentine. Nov. 12, 1909.

All the adults are shewing signs of wear, the January ones being much worn and the February bird moulting.

Ad. Irides hazel; bill, upper half of upper mandible dark brown, lower half and lower mandible deep yellow; legs and toes olive.

Young. Irides hazel; bill black and flesh-coloured; legs and toes pale horn-brown.

The young bird taken in April is moulting into the adult dress.

This is a common and resident species in the Ajó district, and many were seen on the open grass-lands during the river expedition.

The nest is placed in a tuft of grass on the ground, and three or four eggs make the full clutch.

49. EMBERIZOIDES HERBICOLA.

Emberizoides sphenurus, subsp. *herbicola* Sharpe, Cat. B. xii. p. 769.

Emberizoides sphenurus Arg. Orn. i. p. 63.

- a. ♀ ad. Colonia Mihanovitch, N. Argentine. Aug. 12, 1909.

Iris hazel; bill, upper mandible dark horn-coloured, edges

of the upper and whole of the lower mandible yellow; legs and toes yellowish horn-coloured.

50. *CHRYSOMITRIS ICTERICA*.

Chrysomitris ictérica Sharpe, Cat. B. xii. p. 217; Arg. Orn. i. p. 64.

a, b. ♂ ♀ ad. Los Ynglases, Ajó. Sept. 14, 1908.

Iris hazel; bill, feet, and toes black.

c, d. ♀ ad. Los Ynglases, Ajó, Oct. 1908.

e, f, g. ♀ ad. Luiconia, Ajó. Nov. 20, 1908.

h, i. ♀ ad. Los Ynglases, Ajó. Jan. 29, 1909.

k, l. ♂ ad. „ „ Feb. 1909.

m. ♂ ad. „ „ March 12, 1909.

n. ♂ imm. „ „ April 7, 1909.

o. ♂ ad. „ „ Feb. 14, 1910.

The Black-headed Siskin is extremely plentiful in the Ajó district, and usually frequents the Tala and other woods, where its delightful little song can be heard throughout the year.

The nest is an extremely neat little cup-shaped structure composed of wool and thistle-down and lined with hair, and four eggs appear to be the complete clutch, though three are often found. It is placed in a bush or in the fork of a tree, and is not always easy to detect.

The eggs vary somewhat in shape and colour: some are of a very delicate semitransparent blue, others are more opaque, and some are more or less spotted on the obtuse end.

51. *SYCALIS PELZELNI*.

Sycalis pelzelni Sharpe, Cat. B. xii. p. 380; Arg. Orn. i. p. 66.

a. ♂ ad. Los Ynglases, Ajó. Sept. 17, 1908.

b. ♂ young. „ „ Dec. 27, 1908.

c. ♂ young. „ „ Jan. 18, 1909.

d, e. ♂ ad. „ „ Feb. 18, 1909.

f. ♀ ad. „ „ Mar. 10, 1909.

g, h. ♀ ad. „ „ May 24, 1909.

i, j. ♂ ♀ ad. „ „ Dec. 28, 1909.

Ad. ♂. Irides hazel; bill, upper mandible dark olive, lower pale; legs and toes purplish brown.

The December and February adult birds are worn and the March bird is moulting.

The two May females are in the new dress and are much browner than those in worn breeding-plumage.

The young male is rather paler above than fresh-moulted adult females, and is whiter below with more numerous and narrower streaks.

This is a common resident species at Ajó, where it is called the "Canary" or "Yellow House-Sparrow."

It is very tame and often found round habitations, and has a rather sweet song.

It usually breeds in the old nests of *Furnarius rufus* and occasionally under the roofs of outbuildings. The nest is cup-shaped and composed of wool. Eggs were brought home taken at Ajó.

52. SYCALIS ARVENSIS.

Sycalis arvensis Sharpe, Cat. B. xii. p. 382.

a, b, c, d, e. ♂ ♀ ad. Los Ynglases, Ajó. Nov. 10-24, 1908.

f. ♀ ad. Luiconia, Ajó. Nov. 19, 1908.

g. ? young. Los Ynglases, Ajó. Jan. 7, 1909.

h. ♀ ad. " " Feb. 27, 1909.

i, j. ♂ ♀ ad. " " April 3, 1909.

k, l, m. ♂ ♀ ad. " " Dec. 13-24, 1909.

Irides hazel; bill, upper mandible dark brown, lower pale; legs and toes pale brown.

Most of the November and December birds are worn and the February one is moulting.

The April pair are in new dress, though the male is still moulting, and both are apparently fully adult.

The male is much browner above than the breeding-birds and has a distinct wash of greenish across the chest. The female is much browner, both above and below, than the breeding-bird. The young bird is not quite fully fledged.

A very common Finch on all the open grass-lands, often going in flocks in the winter. It is essentially a ground

bird, though it will often perch on the tops of plants and wire fences.

The nest is built on the ground in lowish-lying situations and in the denser vegetation, such as beds of thistles. It is fairly deep and cup-shaped and is a rather frail structure of grass and hair.

53. *CASSICUS ALBIROSTRIS.*

Cassicus albirostris Scl. Cat. B. xi. p. 323.

a. ♂ ad. Arjerichi, Paraguay. Aug. 9, 1909.

Iris white; bill slate-coloured; legs and toes black.

b. ♀ ad. Villa Oliva, Paraguay. Aug. 4, 1909.

c. ♀ ad. Villa Franca, „ Nov. 6, 1909.

54. *AMBLYCERCUS SOLITARIUS.*

Amblycercus solitarius Scl. Cat. B. xi. p. 326; Arg. Orn. i. p. 72.

a. ♂ ad. Puerto Pinasco, Alto Paraguay. Sept. 7, 1909.

Iris reddish brown; bill pale yellow-pearl; legs and toes sooty brown.

b. ♀ ad. Puerto Pinasco, Alto Paraguay. Sept. 7, 1909.

Iris brown; bill yellow-pearl, horn-coloured at base; legs and toes sooty brown.

c. Ad. Villa Pilar, Paraguay. Nov. 7, 1909.

55. *MOLOTHRUS BONARIENSIS.*

Molothrus bonariensis Scl. Cat. B. xi. p. 335; Arg. Orn. i. p. 72.

a, b. ♂ ♀ ad. Los Ynglases, Ajó. Sept. 17, 1908.

Iris hazel; bill, legs, and toes black.

c, d. ♀ ad. Los Ynglases, Ajó. Oct. 29, 1908.

e. ♀ ad.; f. ♂ juv. Los Ynglases, Ajó. Dec. 1908.

g-k. ♂; l. ♀ ad. „ „ Jan. 1909.

m. ♂ ad. Los Ynglases, Ajó. April 28, 1909.

n. ♀ juv. „ „ Dec. 23, 1909.

Bill, legs, and toes dark olive-green.

o. ♂ ad. Los Ynglases, Ajó. Jan. 7, 1910.

p. ♂ ad. Cabo Emma, Alto Paraguay. Oct. 20, 1909.

q. ♂ juv. Villa Pilar, Paraguay. Nov. 7, 1909.

r. ♀ ad. Bella Vista, N. Argentine. Nov. 12, 1909.

This is the commonest of the three Cow-birds found in the Ajó district, and during the winter months congregates in flocks in company with *A. holosericeus*, and does considerable damage to the maize. It was also observed in several localities in the Argentine and Paraguay during the river expedition.

Its parasitical habits have been well described by Hudson and need no further additions.

56. *MOLOTHRUS RUFOAXILLARIS*.

Molothrus rufoaxillaris Scl. Cat. B. xi. p. 338; Arg. Orn. i. p. 86. pl. vi. fig. 2.

a. ♂ ad. Los Ynglases, Ajó. Sept. 12, 1908.

Iris hazel; bill, legs, and toes black.

b. ♂ ad. Los Ynglases, Ajó. Nov. 17, 1908.

c. ♂ juv. „ „ March 23, 1909.

d, e. ♂ ♀ ad. „ „ April 28, 1909.

f. ♂ ad. „ „ Jan. 7, 1910.

This is the least common of the three Cow-birds found at Ajó, and consorts with the flocks of *M. bonariensis*.

It can be distinguished from the male of that species by its duller appearance and different cry. Eggs presumably of this species were taken in the nests of *Pseudoleistes virescens* and *M. badius*.

57. *MOLOTHRUS BADIUS*.

Molothrus badius Scl. Cat. B. xi. p. 338; Arg. Orn. i. p. 95.

a. ♀ ad. Los Ynglases, Ajó. Oct. 29, 1908.

b. ♂ juv. „ „ Nov. 17, 1908.

c. ♂ juv. „ „ Dec. 9, 1908.

d, e. ♂ ♀ juv. Luiconia, Ajó. Dec. 29, 1908.

f. ♀ juv. Los Ynglases, Ajó. Jan. 25, 1909.

g. ♀ ad. „ „ March 10, 1909.

h, i, k, l. ♂ ad. et imm. Los Ynglases, Ajó. May, 1909.

m. ♀ ad. Riacho Ancho, N. Argentine. Aug. 1, 1909.

n. ♀ ad.; o. ♂ imm. Villa Mortero, Paraguay. Aug. 13, 1909.

p. ♀ ad. Goya, N. Argentine. Nov. 13, 1909.

This species is nearly as abundant as *M. bonariensis* in the Ajó district, and was the commonest Cow-bird observed on the river expedition.

The nests taken were found in the old nests of *Anumbius acuticaudatus*, and contained eggs both of this species and of *M. rufoaxillaris*, while, judging by the eggs found in the nest of *Pseudoleistes virescens*, the eggs with large spots and mottlings are those of *M. rufoaxillaris*, and those with the more even markings belong to this species.

58. *DOLICHONYX ORYZIVORUS*.

Dolichonyx oryzivorus Scl. Cat. B. xi. p. 331.

a. ♀ ad. Alto Paraguay, Bolivia. Oct. 15, 1909.

Iris hazel; bill, legs, and toes horn-brown.

59. *AGELÆUS THILIUS*.

Agelæus thilius Scl. Cat. B. xi. p. 343; Arg. Orn. i. p. 97.

a, b. ♂ ad. Los Ynglases, Ajó. Sept. 1908.

Iris dark brown; bill, legs, and toes black.

c. ♀ ad. Los Ynglases, Ajó. Dec. 24, 1908.

d. ♀ ad. „ „ Jan. 4, 1909.

e. ♂ imm. „ „ Feb. 16, 1909.

f, g. ♂ ad. et imm.; h. ♀ ad. Los Ynglases, Ajó. March 1909.

i, k, l. ♂ ad. et imm.; m. ♀ ad. Los Ynglases, Ajó. April 1909.

This is another common and resident species in the Ajó district, and, as a rule, frequents the vast swamps or cañadons; during the winter months it assembles in flocks of several hundred individuals.

The cup-shaped nest is composed of dry grass, and is situated in the thick masses of grass in the swamps only a foot or so above the level of the ground or water. Three eggs appear to form the complete clutch.

60. *AGELÆUS RUFICAPILLUS*.

Agelæus ruficapillus Scl. Cat. B. xi. p. 347; Arg. Orn. i. p. 99; Claude Grant, Bull. B. O. C. xxv. p. 114 (1910).

a. ♂. Mortero, Paraguay. Aug. 13, 1909.

Iris hazel ; bill black, livid at the base of lower mandible.

Several small flocks of this bird were seen frequenting the edges of the swamps in the locality where the specimen was secured.

The female described in the Bull. B. O. C., as above referred to, was shot by Miss Runnacles in the swamps at Ajó, which appears to be a very southern locality for the species.

61. *AGELÆUS CYANOPUS*.

Agelæus cyanopus Scl. Cat. B. xi. p. 344.

a. ♀ ad. Bella Vista, N. Argentine. Nov. 12, 1909.

Iris brown ; bill blackish brown ; legs and toes dark ashy brown.

b, c. ♂ ; d, e. ♀ ad. Esquina, N. Argentine. Nov. 14, 1909.

Iris brown ; bill, legs, and toes black.

f, g, h. ♀ ad. Esquina, N. Argentine. Nov. 17, 1909.

62. *LEISTES SUPERCILIARIS*.

Leistes superciliaris Scl. Cat. B. xi. p. 349 ; Arg. Orn. i. p. 100.

a. ♂ ad. Alto Paraguay, Bolivia. Sept. 22, 1909.

Iris brown ; bill slate-coloured, culmen and tips black ; legs and toes purplish brown.

b. ♂ ad. Alto Paraguay, Bolivia. Oct. 15, 1909.

This bird was only observed in Bolivian territory, where several flocks of two or three hundred individuals frequented the long grass bordering a large lagoon.

63. *AMBLYRHAMPHUS HOLOSERICÆUS*.

Amblyramphus holosericeus Scl. Cat. B. xi. p. 350 ; Arg. Orn. i. p. 101.

a, b. ♂ ♀ ad. Los Ynglases, Ajó. Dec. 28, 1908.

c, d. ♂ ad. ; e, f, g. ♂ juv. Los Ynglases, Ajó. Feb. 1909.

Iris dark brown ; bill, legs, and toes black.

h, i. ♂ ♀ ad. ; k, l. ♂ imm. Los Ynglases, Ajó. April 1909.

m-q. ♂ ♀ ad. et imm. Los Ynglases, Ajó. May 1909.

r. ♀ ad. Los Ynglases, Ajó. Feb. 3, 1910.

A very common and resident species in the Ajó district. During the winter months it assembles in large flocks and does no inconsiderable damage to the maize crops. These flocks present an exceedingly pretty picture with their red heads contrasting with the black wings and body.

The nest is placed, as a rule, in the cañadons and is a deep cup-shaped structure of dry swamp-grass built between the stems of strong plants. Three eggs appear to be the full clutch.

The call is a sort of whistle.

64. PSEUDOLEISTES VIRESCENS.

Pseudoleistes virescens ScI. Cat. B. xi. p. 352; Arg. Orn.

i. p. 102.

a. ♀ ad. Los Ynglases, Ajó. Oct. 30, 1908.

b. ♂ ad. " " Nov. 24, 1908.

Iris hazel; bill, legs, and toes black.

c. ♂ ad.; *d, e.* ♂ ♀ juv. Los Ynglases, Ajó. Jan. 2, 1909.

f, g. ♂ ♀ juv. Los Ynglases, Ajó. Jan. 7, 1910.

One of the commonest of the resident species in the Ajó district, being the "Pecho amarillo" of the Spaniards; it is usually found in flocks throughout the year, especially during the winter months. It is an inquisitive and noisy bird, especially when going to roost.

The nest is placed either in the herbage in the cañadons or in low bushes or shrubs in the woods, and sometimes in the Tala trees; it is a large cup-shaped structure. Five or six eggs seem to be the full clutch, though this number is not often found, owing to the Cow-birds *Molothrus bonariensis* and *M. rufoaxillaris* being parasitic on this species, especially the latter. In some nests I have found only the eggs of the Cow-bird, those of the Yellow-breast having been all destroyed.

65. TRUPIALIS MILITARIS.

Trupialis militaris Scl. Cat. B. xi. p. 356; Arg. Orn. i. p. 104.

a. ♂ ad. Los Ynglases, Ajó. Nov. 10, 1908.

Iris dark brown; bill, upper mandible black and pale slate-coloured, lower pale slate-coloured; legs and toes horn-brown.

b. ♂ imm. Tuyu, Ajó. Dec. 2, 1908.

c. ♂ juv. Cape San Antonio. Dec. 21, 1908. •

Iris hazel; bill pale brown, gape cream-coloured; legs and toes very pale ash.

d, e. ♂ ♀ ad. Los Ynglases, Ajó. Feb. 27, 1909.

f, g, h. ♂; i. ♀ ad. Los Ynglases, Ajó. May 1909.

k. ♂ ad. Los Ynglases, Ajó. Dec. 29, 1909.

l, m. ♂ ♀ ad. Los Ynglases, Ajó. Jan. 11, 1910.

Quite a common resident in the Ajó district, especially in the sand-hills bordering the coast-belt.

It also breeds there, the nest being a little dry grass placed on the ground under a tuft of grass or thistles. Three eggs appear to form the complete clutch.

I have only found the nest by actually riding over it, the hen bird rising under the horse's feet, when the white under wings can be easily seen which distinguish this species from *T. defilippii*.

66. TRUPIALIS DEFILIPPII.

Trupialis defilippii Scl. Cat. B. xi. p. 357; Arg. Orn. i. p. 105.

a. ♂; b-f. ♀ ad. Los Ynglases, Ajó. April 1909.

Iris dark brown; bill pearly slate-coloured; legs and toes purplish brown.

g, h, i. ♂ ad. Los Ynglases, Ajó. May 1909.

This species appeared in large numbers at Ajó after the breeding-season and frequented the open grass-lands, being a pretty and conspicuous object.

It cannot be distinguished from *T. militaris* on the ground, but on the wing the black under wing-coverts at once distinguish it from that species.

67. *ICTERUS PYRRHOPTERUS.*

Icterus pyrrhopterus Scl. Cat. B. xi. p. 368; Arg. Orn. i. p. 107.

a. ♂ ad. Villa Franca, Paraguay. Aug. 10, 1909.

Iris hazel; bill black; toes very dark ash.

b. ♀ ad. Puerto Maria, Alto Paraguay. Oct. 24, 1909.

c, d. ♂ ♀ ad. Santa Elena, Northern Argentine. Nov. 15, 1909.

68. *APHOBUS CHOPI.*

Aphobus chopi Scl. Cat. B. xi. p. 405; Arg. Orn. i. p. 108.

Gnorimopsar chopi Richmond, Proc. U.S. Nat. Mus. xxxv. p. 584 (1908).

a, b. ♀ ad. Santa Rosa, Paraguay. Aug. 14, 1909.

Iris hazel; bill, legs, and toes black.

c. ♂ ad. Cabo Emma, Alto Paraguay. Oct. 20, 1909.

Several flocks of twenty or thirty individuals were observed during the river expedition frequenting the open grass-land at the edge of the woods.

69. *CYANOCORAX CHRYSOPS.*

Cyanocorax chrysops Sharpe, Cat. B. iii. p. 120; Arg. Orn. i. p. 110.

a. ♀ ad. Riacho Ancho, N. Argentine. July 31, 1909.

Iris lemon-yellow; bill, legs, and toes black.

Very common in all the woods throughout Paraguay and Brazil, and found in flocks of from ten to twelve individuals.

An extremely noisy and inquisitive bird, coming within a few feet of anyone passing through the woods.

70. *CYANOCORAX CÆRULEUS.*

Cyanocorax cæruleus Sharpe, Cat. B. iii. p. 126; Arg. Orn. i. p. 110.

a. ♀ ad. Riacho Ancho, N. Argentine. July 31, 1909.

Iris brown; bill, legs, and toes black.

b. ♀ ad. Curuzu Chica, Paraguay. Aug. 28, 1909.

c. ♀ ad. Humaita, Paraguay. Nov. 7, 1909.

Commonly observed north of Corrientes in small parties in the woods. Very noisy and somewhat inquisitive.

71. MYIOTHERETES RUFIVENTRIS.

Myiotheretes rufiventris Scl. Cat. B. xiv. p. 8; Arg. Orn. i. p. 112.

a. Los Ynglases, Ajó. Jan. 16, 1909.

Irides dark brown; bill, legs, and toes black.

The only specimen seen, and this was on the ground; it resembles a Thrush. It is in very worn plumage, but is not moulting.

72. TÆNIOPTERA NENGETA.

Tænioptera nengeta Scl. Cat. B. xiv. p. 11; Arg. Orn. i. p. 114.

a. ♂ ad. Los Ynglases, Ajó. Oct. 29, 1908.

b. ♀ ad. Riacho Ancho, N. Argentine. Aug. 1, 1909.

Irides deep red; eyelid pale yellow; bill, legs, and toes black.

Only one specimen was observed at Ajó; but several were seen on the river expedition; they were usually observed sitting solitary on the top of a stump or low tree or bush.

73. TÆNIOPTERA DOMINICANA.

Tænioptera dominicana Scl. Cat. B. xiv. p. 13; Arg. Orn. i. p. 117.

a. ♂ ad. Luiconia, Ajó. April 29, 1909.

Irides dark brown; bill, legs, and toes black.

This specimen is in full plumage and is just completing the moult on the head.

Several of these birds were seen on the 29th of April, but were so wild that I could only secure one.

A pair or so are always to be seen at Luiconia on the outskirts of the rough grass country, but I am by no means sure that it breeds there.

74. TÆNIOPTERA IRUPERO.

Tænioptera irupero Scl. Cat. B. xiv. p. 13; Arg. Orn. i. p. 118.

a. ♂ ad. Tayru, Paraguay. Aug. 5, 1909.

b. ♀ ad. Villa Franca, Paraguay. Aug. 5, 1909.

c. ♀ ad. Colonia Mihanovitch, N. Argentine. Aug. 12, 1909.

Irides brown; bill, legs, and toes black.

Many of this "Widow-bird" were seen on the river expedition, always alone and perched on the tops of solitary bushes, whence they fly off to take passing insects.

75. FLUVICOLA ALBIVENTRIS.

Fluvicola albiventris Scl. Cat. B. xiv. p. 36; Arg. Orn. i. p. 121.

a. ♂ ad. Colonia Risso, Paraguay. Sept. 8, 1909.

Irides hazel; bill, legs, and toes black.

Quite a number of these birds were seen frequenting the water-weeds and vegetation on the river-banks. When on the ground at first sight they look like Wagtails.

76. ARUNDINICOLA LEUCOCEPHALA.

Arundinicola leucocephala Scl. Cat. B. xiv. p. 37; Arg. Orn. i. p. 122.

a, b, c. ♂ ♀ ad. & young. Monte Alto, Paraguay. Aug. 25, 1909.

d. ♂ young. Alto Paraguay, Bolivia. Oct. 17, 1909.

Iris hazel; bill, legs, and toes black, base of lower mandible pale yellow.

The adult male and female are rather worn.

The August young male is similar to the adult female, but rather paler, and has some long white feathers on the head.

The October young bird is more advanced, having almost assumed the white head, and black feathers are rapidly replacing the cinereous dress of the back and wings and the white of the under parts.

This bird was first observed at Monte Alto and occasionally afterwards to the northward, but was by no means common. It frequented the sandy shores of the river and lagoons, and perched on any outstanding piece of driftwood.

77. *SISOPYGIS ICTEROPHRYS*.

Sisopygis icterophrys Scl. Cat. B. xiv. p. 41; Arg. Orn. i. p. 125.

a, b. ♂ ♀ ad. Los Ynglases, Ajó. Sept. 16, 1908.

c, d, e, f, h, i, j, k. ♂ ♀ ad. Los Ynglases, Ajó. Oct. 10-31, 1908.

l, m. ♂ ad. Los Ynglases, Ajó. Nov. 8, 1908. .

n. ♂ ad. „ „ Dec. 11, 1908.

o, p, q, r, s. ♂ ♀ ad. & young. Los Ynglases. Jan. 5-18, 1909.

t. ♀ ad. Los Ynglases, Ajó. Feb. 15, 1909.

u. ♀ ad. „ „ Apr. 23, 1909.

Irides hazel; bill and legs and toes black.

The adult females are not only less bright than the males but have a distinct wash of olive across the chest.

One of the November birds and the December one are much worn and faded, but the other November bird is still quite bright and hardly worn.

The January and February adults are moulting, the old feathers looking much worn and faded against the new plumage; but the April bird, except for the head, has completed the moult.

Neither of the two young birds is quite fledged; they differ from the adults as follows:—

“Above, including head, bright olive-green; wings blackish, broad ends of coverts and outer edges of secondaries pale yellow; beneath, throat very pale yellow; breast striped with dull olive-green.

A common bird in the Tala woods in the Ajó district, to which it is a summer visitor, arriving in the early part of September and leaving again towards the end of April. Miss Runnacles' first record of its appearance for the summer of 1909 is Sept. 8th. The nest is open and cup-shaped and composed of twigs lined with feathers. Usually very little attempt is made at concealment, it being placed in the fork of a low shrub or tree, seldom at any great height, and in a more or less open situation.

The usual clutch of eggs is three, but occasionally four are found.

78. LICHENOPS PERSPICILLATA.

Lichenops perspicillata ScL. Cat. B. xiv. p. 48; Arg. Orn.

i. p. 129.

a, b. ♂ ♀ ad. Los Ynglases, Ajó. Nov. 5, 10, 1908.

c, d. ♀ ad. Cape San Antonio. Dec. 16, 21, 1908.

e, f. ♀ ad. Los Ynglases, Ajó. Jan. 2, 29, 1909.

g, h, i, j, k, l, m. ♂ ♀ ad. & young. Los Ynglases, Ajó. Feb. 7-16, 1909.

n. ♀ ad. Monte Alto, Paraguay. Aug. 25, 1909.

o, p. ♂ ad. Bella Vista, N. Argentine. Nov. 12, 1909.

Ad. ♂. Irides, bill and wattles pale Naples-yellow; legs and toes black.

Ad. ♀. Irides, bill and wattles Naples-yellow, much paler than in the male, tip of bill horny; legs and toes black.;

Young ♂. Irides raw sienna, eyelid very pale Naples-yellow; bill brown-horn-coloured at tip, white-horn-coloured at base, gape slightly yellow; legs and toes black.

The December and January birds are shewing signs of wear, and the February females are much worn, but are not yet moulting, though the male for the same month is in full moult.

There are four young birds taken in February, three males and one female; and although the female is slightly paler than the male, there is no real difference between them, and, "except for the softer texture of the feathering and the narrower striping of the breast, they are similar to the adult female."

The "Silver-bill" is common and resident in the Ajó district, and a few were observed on the river expedition. It frequents the great swamps, where also it nests, placing the structure at the bottom of a clump of rushes or long grass, usually in a dry spot.

The nest is open and cup-shaped, composed of dry grass and flags, and is very difficult to find, especially as the hen slips off it long before the searcher is anywhere near, and only by carefully watching her can the nest be discovered. The full clutch consists of three eggs, and the young are at first covered with black down.

79. MACHETORNIS RIXOSA.

Machetornis rixosa Scl. Cat. B. xiv. p. 52 ; Arg. Orn. i. p. 131.

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| a. ♂ ad. | Los Ynglases, Ajó. | Sept. 14, 1908. |
| b. ♂ ad. | „ „ | Nov. 5, 1908. |
| c. ♀ ad. | Luiconia, „ | Dec. 29, 1909. |
| d, e. ♀ ♂ ad. & yg. | Los Ynglases, Ajó. | Feb. 27–Mar. 1, 1909. |
| f, g, h, i, j. ♂ ad. & yg. | „ „ | Mar. 3–30, 1909. |
| k, l. ♀ ad. | „ „ | Apr. 23, 1909. |
| m. ♀ ad. | „ „ | May 11, 1909. |
| n. ♂ ad. | Villa Franca, Paraguay. | Aug. 10, 1909. |
| o. ♂ ad. | Monte Alto, „ | Aug. 25, 1909. |
| p. ♀ ad. | Colonia Risso, „ | Sept. 8, 1909. |
| q. ♂ ad. | Near Goya, N. Argentine. | Nov. 13, 1909. |

The February, March, and April adults are moulting and some have almost assumed the new dress.

The November bird from Goya is much worn and is moulting on the chest.

Ad. Irides clear hazel ; bill, legs, and toes black.

A common and resident species in the Ajó district and many individuals were also observed on the river expedition. It is usually seen following the stock about and catching the flies that surround the cattle, horses, and sheep, while it will frequently perch on the backs of the animals.

80. CENTRITES NIGER.

Centrites niger Scl. Cat. B. xiv. p. 61 ; Arg. Orn. i. p. 134.

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| a. ♂ ad. | Los Ynglases, Ajó. | Jan. 29, 1909. |
| b, c, d, e, ♂ ad. & yg. | „ „ | Feb. 5–26, 1909. |
| f, g, h. ♂ ♀ ad. & yg. | „ „ | Mar. 30, 1909. |
| i. ♂ young. | „ „ | April 15, 1909. |
| j. ♂ ad. | „ „ | Jan. 11, 1910. |

♂. Irides dark brown ; bill, legs, and toes black. ;

The January, February, and March adults are moulting, the latter birds having almost completed the change.

One of the February young males is in full adult plumage except for the ashy edge to the feathers of the head and under parts.

The April young bird is moulting and the new feathers on the under parts are black, broadly edged and tipped with ashy, which points to an intermediate immature stage before the adult dress is reached.

The young appear to differ from the adult as follows :—

Young male. “Similar to adult female, except perhaps cheeks and throat somewhat paler.”

Young female. “Above, including back, brown ; beneath paler ashy than adult.”

This species is a winter visitor to the Ajó district, making its appearance about the 8th of January and leaving again in July, Miss Runnacles' last record being the 26th of that month. It usually frequents open ground where little or no vegetation exists, especially well-worn roads and tracks.

In the middle of the winter, when the majority have arrived, as many as thirty or forty may be seen together, continually darting backwards and forwards catching their insect food. When alarmed they will fly for quite considerable distances before alighting, the flight being swift and fairly straight, but always close to the ground.

The young are indistinguishable in life from the adult females, and neither are easily seen on the ground they frequent ; but the black and chestnut adult males make conspicuous objects.

81. TODIROSTRUM CINEREUM.

Todirostrum cinereum Scl. Cat. B. xiv. p. 69.

a. ♂ ad. Rabicho, Brazil. Oct. 8, 1909.

b. ♂ ad. Cabo Emma, Paraguay. Oct. 20, 1909.

Irides pale yellow ; bill very dark slate-coloured ; legs and toes blue-slate-coloured.

82. EUSCARTHMUS MARGARITACEIVENTRIS.

Euscarthmus margaritaceiventer Scl. Cat. B. xiv. p. 80 ; Arg. Orn. i. p. 136.

a. ♂ ad. Puerto Pinasco, Paraguay. Sept. 7, 1909.

b, c. ♂ ♀ ad. Pan de Azucar, Brazil. Sept. 17, 1909.

d. ♂ ad. Cabo Emma, Paraguay. Oct. 20, 1909.

e. ♀ ad. Puerto Maria, Paraguay. Oct. 24, 1909.

f. ♀ ad. Near Villa Franca, ,, Nov. 6, 1909.

♂. Irides yellow ; bill, legs, and toes brown.

♀. Irides pale yellow ; bill, legs, and toes horn-brown.

The females taken on the 24th of October and 6th of November were sitting.

Only observed in the undergrowth and very tame. The call is in several syllables and loud and clear.

83. HAPALOCERCUS FLAVIVENTRIS.

Hapalocercus flaviventris Scl. Cat. B. xiv. p. 94 ; Arg. Orn.

i. p. 137.

a. ♀ ad. Los Ynglases, Ajó. Oct. 27, 1908.

b. ♂ ad. ,, ,, Nov. 4, 1908.

c. ♀ young. ,, ,, Feb. 9, 1910.

Ad. Irides hazel ; bill, legs, and toes dark brown.

The young bird differs from the adult in being :—

“Above more buffy brown than ‘mouse-brown,’ edgings of the wing-feathers and coverts buffy brown ; below bright buff ; throat buffy slate, centre of breast and belly and under tail-coverts pale creamy yellow.”

A fairly common bird throughout the summer in the Ajó district, frequenting rough situations, including the drier parts of the cañadon. It is retiring in habits, creeping about the tall reeds, thistles, or grass, after the manner of a Sedge-Warbler.

I have only once come across the nest ; this was a deep cup-shaped structure composed of water-weeds glued together and attached to the stems of some stout reeds, and except for its larger size was similar to the nest of *Cyanotis rubrigaster*.

84. SERPOPHAGA SUBCRISTATA.

Serpophaga subcristata Scl. Cat. B. xiv. p. 102 ; Arg. Orn.

i. p. 140.

a, b. ♂ ♀. Los Ynglases, Ajó. Sept. 10–18, 1908.

c, d. ♂ young. ,, ,, Jan. 2, Mar. 10, 1909.

e. ♀ ad. ,, ,, May 4, 1909.

f. ♂ ad. Colonia Mihanovitch, N. Argentine. Aug. 12, 1909.

g. ♂ ad. Santa Rosa, Paraguay. Aug. 14, 1909.

h. ♂ young. Pan de Azucar, Brazil. Sept. 19, 1909.

Irides dark brown.

The young birds are very similar to the adults, except for the more buffy tips to the wing-coverts, and there is no subcoronal white crest.

A summer visitor to the Ajó district, arriving about September 7th, according to Miss Runnacles, and leaving again about May.

It is a very solitary bird, seen singly or in pairs, hopping about in the trees: the only sound that I have heard it utter is a low sharp chirp.

I have not taken the eggs, but there are two sets in Miss Runnacles' collection, and she remarks: "Of the nesting-habits I know very little, having only taken two nests, one of these being placed in a gorse bush and the other in the middle of a clump of yellow broom: in both cases the number of eggs was three, which is apparently the full clutch."

The nest is deep and cup-shaped.

85. SERPOPHAGA NIGRICANS.

Serpophaga nigricans ScI. Cat. B. xiv. p. 112; Arg. Orn. i. p. 141.

a, b. ♂ ♀ ad. Los Ynglases, Ajó. Sept. 24, 1908.

c, d, e, f, g, h. ♂ ♀ ad. & yg. Los Ynglases, Ajó. Nov. 5-12, 1908.

i, j, k. ♂ ♀ ad. Luiconia, Ajó. Nov. 19-20, 1908.

l. ♂ ad. Los Ynglases, „ Dec. 18, 1908.

m. ♂ ad. „ „ May 30, 1908.

n. ♀ ad. Villa Oliva, Paraguay. Aug. 11, 1909.

Irides hazel; bill, legs, and toes black.

The November and December adults are getting rather worn.

The two young birds were taken from the nest: they are rather greyer than the adults and have no white subcoronal crest.

Quite one of the commonest woodland birds of the Ajó district, where it breeds, placing a cup-shaped nest of lichen and moss lined with feathers in any convenient situation in the fork of a tree or bush, under a bridge, or down the side of a well: three eggs make the complete clutch.

86. *CYANOTIS RUBRIGASTER*.

Cyanotis azaræ Scl. Cat. B. xiv. p. 110; Arg. Orn. i. p. 142.

Cyanotis rubrigaster Sharpe, Hand-l. iii. p. 113.

a, b. ♂ ♀ ad. Los Ynglases, Ajó. Oct. 3, 1908.

c, d. ♂ young. " " Mar. 13, 1909.

e, f. ♀ young. " " Feb. 16, 1910.

In the female the superciliary stripe is more green than in the male.

The young differs from the adult as follows:—

“Above, head dull black tipped with buff; superciliaries buff in front of eye, white behind; lores and ear-coverts black, the latter tipped with buffy; back and rump green tipped with buff; wings as in the adult, except that the edges of the lesser coverts are buff and the white is tinged with buffy; below, throat and neck buffy white, rest creamy buff with only the faintest indication of the breast-band; tail as in the adult.”

Both the March young birds are moulting into the adult stage.

A fairly common bird in the Ajó district and frequenting the great swamps and reed beds, where it nests.

I have not myself taken the eggs, but there are two clutches in the collection of Miss Runnacles, taken at Ajó, the nest being as described by Hudson.

87. *ELAINEA ALBICEPS*.

Elainea albiceps Scl. Cat. B. xiv. p. 141; Arg. Orn. i. p. 145; Berlepsch, Ornis, xiv. p. 403.

a. ♀ ad. Los Ynglases, Ajó. Jan. 18, 1909.

Irides hazel; bill dusky brown, base of lower mandible fleshy, gape orange; legs and toes dark sooty brown.

In rather worn plumage, the only one observed in the Ajó district.

88. ELAINEA ALBIVERTEX.

Elainea albivertex Berlepsch, Ornith. xiv. p. 400 (1907).

a. ♂ ad. Curuzu Chica, Paraguay. Oct. 29, 1909.

89. ORNITHION CINERASCENS.

Ornithion cinerascens Allen, Bull. Amer. Mus. ii. p. 231 (1890).*Ornithion obsoletum* ScL. Cat. B. xiv. p. 127.

a. ♂ ad. Curuzu Chica, Paraguay. Oct. 29, 1909.

90. EMPIDAGRA SUIRIRI.

Empidagra suiriri ScL. Cat. B. xiv. p. 154; Arg. Orn. i. p. 146.

a, b, c. ♀ ad. Tayru, Paraguay. Aug. 6, 1909.

d. ♀ ad. Santa Rosa, „ Aug. 14, 1909.

Irides hazel; bill, legs, and toes blackish brown.

91. RHYNCHOCYCLUS SULPHURESCENS.

Rhynchocyclus sulphurescens ScL. Cat. B. xiv. p. 168; Arg. Orn. i. p. 147.

a, b. ♂ ♀ ad. Puerto San Juan, Paraguay. Aug. 26, 1909.

c. ♂ ad. Curuzu Chica, Paraguay. Oct. 29, 1909.

Irides hazel; bill, upper mandible black, lower mandible slate-coloured; legs and toes slate-coloured.

92. PITANGUS BOLIVIANUS.

Pitangus bolivianus ScL. Cat. B. xiv. p. 177; Arg. Orn. i. p. 147.

a, b. ♂ ♀ ad. Los Ynglases, Ajó. Nov. 19, 1908.

c, d, e, f, g. ♂ ♀ ad. & yg. „ „ Dec. 1-9, 1908.

h, i, j, k. ♂ ♀ ad. & yg. „ „ Jan. 5-18, 1909.

l, m. ♂ ♀ young. „ „ Feb. 18, 1909.

n, o, p. ♂ ♀ ad. & yg. „ „ Mar. 1-5, 1909.

q. ♂ young. „ „ Dec. 27, 1909.

r, s. ♂ ♀ ad. & yg. „ „ Jan. 4-5, 1910.

t, u, v. ♂ ♀ ad. & yg. „ „ Feb. 14-21, 1910.

w. ♂ ad. Riacho Ancho, N. Argentine. July 30, 1909.

x. ♂ ad. Mortero, Paraguay. Aug. 13, 1909.

y. ♂ ad. Riacho Paraguay, Mirin, Brazil. Oct. 3, 1909.

Ad. Irides hazel; bill and legs and toes black.

Young. Irides pale hazel; bill black, gape pale yellow; legs and toes sooty.

One of the December and the January and February adults are moulting.

One of the young birds in first plumage shot in December has the bases of the feathers of the crown yellow; but this is quite exceptional, as all the others have black crowns.

Several of the young taken in February and March are moulting into the adult dress, whilst others, no doubt of a later brood, are still in young plumage.

This is the commonest of the Tyrannidæ in the Ajó district, where it is resident. It is both insectivorous and carnivorous, and is frequently seen picking the meat off skins and carcasses. When I have broken open the nests of Oven-birds, looking for eggs, and left the young exposed, this bird has more than once eaten them up.

The nest is a large untidy structure of wool, grass, and other rubbish placed in any convenient situation in a bush, tree, or on the top of a post, the entrance being at the side. Five eggs appear to be the complete clutch, though a set of six is in Miss Runnacles' collection.

93. *MYIODYNASTES SOLITARIUS.*

Myiodynastes solitarius ScL. Cat. B. xiv. p. 185; Arg. Orn. i. p. 150.

a. ♂ ad. Near Villa Pilar, Paraguay. Nov. 7, 1909.

“Irides brown; bill black, fleshy at the base of the lower mandible; legs and toes purplish brown.”

94. *MYIOBIUS NÆVIUS.*

Myiobius nævius ScL. Cat. B. xiv. p. 209; Arg. Orn. i. p. 151.

a, b. ♂ ♀ ad. Near Santa Elena, N. Argentine. Nov. 15, 1909.

Irides hazel; bill, upper mandible dark, lower light brown; legs and toes almost black.

The crest in the male is lemon-yellow and in the female cinnamon.

95. PYROCEPHALUS RUBINEUS.

Pyrocephalus rubineus Scl. Cat. B. xiv. p. 211; Arg. Orn.

i p. 152.

a. ♂ ad.	Los Ynglases, Ajó.	Sept. 26, 1908.
b. ♀ ad.	„ „	Oct. 31, 1908.
c, d, e. ♂ ♀ ad.	„ „	Nov. 9-12, 1908.
f. ♀ ad.	„ „	Dec. 24, 1908.
g, h, i, j. ♂ ♀ ad. et yg.	„ „	Feb. 1-3, 1909.
k, l. ♂ young.	„ „	Mar. 12-23, 1909.
m. ♂ young.	„ „	April 19, 1909.
n, o. ♂ ♀ yg. & ad.	„ „	Dec. 27, 1909.
p. ♂ ad.	„ „	Jan. 17, 1910.

Irides hazel; bill, legs, and toes black.

One of the adult females has several coloured feathers on the head, another has one on the chest: four other females are tinged with colour on the under tail-coverts, and all are rather worn.

The males appear to have a double moult, one in February and March (the autumn moult) and another in August.

The specimens taken in February, March, and April appear at first sight to be young birds assuming the adult plumage, but I am by no means sure of this; and it strikes me that they are either adults assuming an off-season particoloured dress or are young birds changing from an intermediate to the adult stage. What appears certain is that they are not young in the first dress changing to the full adult plumage, as the ashy feathers of the crown are too dark and without edgings, and the streaked feathers of the under parts are similar to those of the adult female.

The adult male taken on the 3rd of February is moulting, and ashy feathers are appearing on the breast, while many of the new feathers on the moulting March and April birds are particoloured, *i. e.* partly grey and partly red.

But there are some specimens in the British Museum taken in April and May in full red dress that do not bear this out. So that the second conclusion is perhaps the nearer one, that is, that the young do not assume the adult dress in one moult, and have a particoloured stage lasting probably over

one season; but I have no skins to prove this absolutely, and the reason for the February adult assuming ashy feathers needs further explanation.

The young in first plumage are :—

“Ashy cinereous above, each feather edged with buffy white, as likewise are the wing-coverts, bastard wing, and inner secondaries; the tail is also tipped with buff; below white or buffy white, striated with ashy on the breast and flanks; under tail-coverts creamy with ashy centres; axillaries and under wing-coverts edged with cream-colour, more ashy in some specimens.”

This is a common bird throughout the summer in the Ajó district, but was only once observed during the river expedition, when two males were seen near Pedernal on the 30th of August.

The males are striking and pretty objects and have all the habits of a Flycatcher; but, unlike most of its congeners, this species has the habit of soaring for short distances with rapid beats of the wings from the top of some tree and returning to the same spot.

In the evening it utters a mournful note of “churinche,” and probably from this note comes the local name of “Churinche.”

The nest is composed of lichen lined with a few feathers and is a very flat structure with a slight cup-shaped depression: as a rule, it is placed in the fork of a tree clothed in lichen, often at no great height, and is extremely difficult to pick out.

96. EMPIDochANES FRINGILLARIS.

Empidochanes fringillaris ScL. Cat. B. xiv. p. 216.

a. ♂ ad. Pan de Azucar, Brazil. Sept. 20, 1909.

Irides hazel; bill horn-brown; legs and toes purplish brown.

97. MYIARCHUS TYRANNULUS.

Myiarchus tyrannulus ScL. Cat. B. xiv. p. 251; Arg. Orn. i. p. 156.

a. ♀ ad. Puerto Asir, Paraguay. Aug. 27, 1909.

b. ♀ ad. Pan de Azucar, Brazil. Sept. 20, 1909.

c, d. ♂ ♀ ad. Colonia Mihanovitch, N. Argentine. Nov. 5, 1909.

The November female was sitting. I was unable to distinguish this species in life from *M. ferox*.

98. MYIARCHUS FEROX.

Myiarchus ferox Scl. Cat. B. xiv. p. 253; Arg. Orn. i. p. 156.

a. ♂ ad. Arjerichi, Paraguay. Aug. 9, 1909.

b. ♂ ad. Puerto San Juan, Paraguay. Aug. 26, 1909.

c. ♂ ad. Desaguadero, Paraguay. Aug. 29, 1909.

d. ♂ ad. Sapatero Cué, Paraguay. Sept. 3, 1909.

e. ♂ ad. Riacho Paraguay, Mirin, Brazil. Oct. 2, 1909.

f. ♂ ad. Rabicho, Brazil. Oct. 8, 1909.

g. ♂ ad. Boca de Homiguera, Brazil. Oct. 9, 1909.

h. ♀ ad. Fuerte Olimpo, Paraguay. Oct. 21, 1909.

Irides hazel; bill brown; legs and toes very dark slate-coloured.

Numbers of this Tyrant were observed throughout the river expedition. They were usually seen perched on the tops of the trees, from which they made short flights to catch passing insects.

On the 9th of October at Boca de Homiguera a pair were seen carrying building materials, and were evidently starting to nest.

99. EMPIDONOMUS AURANTIO-ATRO-CRISTATUS.

Empidonomus aurantio-atro-cristatus Scl. Cat. B. xiv. p. 266; Arg. Orn. i. p. 157.

a. ♂ ad. Boca de Homiguera, Brazil. Oct. 9, 1909.

Irides brown; bill, legs, and toes sooty-black.

100. TYRANNUS MELANCHOLICUS.

Tyrannus melancholicus Scl. Cat. B. xiv. p. 273; Arg. Orn. i. p. 158.

a. ♂ ad. Los Ynglases, Ajó. Feb. 3, 1909.

b. ♂ ad. „ „ Mar. 12, 1909.

c. ♂ ad. „ „ Dec. 29, 1909.

d, e. ♂ ♀ ad. Porto Esperança, Brazil. Oct. 13, 1909.

f, g. ♂ ♀ ad. Colonia Mihanovitch, N. Argentine. Nov. 5, 1909.

Irides hazel ; bill, legs, and toes black.

The November birds are shewing signs of wear and fading ; and the female on dissection was found to be laying.

The December bird is starting to moult on the back, and the March bird is in full moult and has almost assumed the new feathering on the body.

A rare visitor to the Ajó district, only four being observed there during both my visits.

On the river expedition not many were seen altogether, though at Porto Esperança quite a number were about, which I think had only just arrived there.

101. *MILVULUS TYRANNUS.*

Milvulus tyrannus Sel. Cat. B. xiv. p. 277 ; Arg. Orn. i. p. 160.

a, b, c. ♂ ♀ ad. Los Ynglases, Ajó. Oct. 21–27, 1908.

d. ♀ ad. „ „ Jan. 7, 1909.

e. ♀ ad. „ „ Jan. 19, 1910.

f. ♂ ad. Pan de Azucar, Brazil. Sept. 19, 1909.

Irides hazel ; bill, legs, and toes black.

The Scissor-tailed Tyrant is a summer visitor to the Ajó district, making its appearance about October and leaving again towards April.

The males appear to arrive first, followed soon after by the females, when breeding operations are commenced, the nest being almost invariably placed on the outside branches either of solitary trees or of those on the edge of the montes, generally in rather conspicuous positions and between from ten to twenty feet from the ground. The fabric is placed on some horizontal branch or in a fork ; it is cup-shaped in form, and composed of thistle-down, grass, and wool, the full clutch of eggs being four.

As a rule, this bird is seen perched on wire fences or on the tops of plants in the open camp from which

it darts out to catch any passing insect ; and it is then that the bird is seen to the best advantage, and the pretty action of opening and closing of the tail as it twists and turns (from which it gets its name) is observed.

The force with which the outer tail-feathers are opened against the air causes them to curve, and hence when the tail is fully opened the tips of the longer feathers almost touch and form a semicircle.

Miss Runnacles' first record of the appearance of this species for 1909 in the Ajó district is October 11th.

102. *TITYRA BRASILIENSIS.*

Tityra brasiliensis Scl. Cat. B. xiv. p. 329.

a. ♂ ad. Coimbrá, Brazil. Oct. 15, 1909.

Irides brown ; bill deep slate-coloured, base and orbits dull crimson ; legs and toes dark slate-coloured.

103. *PLATYPSARIS ATRICAPILLUS.*

Hadrostomus atricapillus Scl. Cat. B. xiv. p. 333.

a. ♂ ad. Cabo Emma, Paraguay. Oct. 20, 1909.

Irides dark brown ; bill slate-coloured, upper mandible very dark ; legs and toes slate-coloured.

104. *PACHYRHAMPHUS VIRIDIS.*

Pachyrhamphus viridis Scl. Cat. B. xiv. p. 338.

a. ♂ ad. Opposite Rabicho, Brazil. Oct. 10, 1909.

Irides hazel ; bill, legs, and toes slaty.

105. *CASIORNIS RUBRA.*

Casiornis rubra Scl. Cat. B. xiv. p. 365 ; Arg. Orn. i. p. 163.

a. ♂ ad. Puerto San Juan, Paraguay. Aug. 26, 1909.

Irides hazel ; bill flesh-coloured at base, horn-coloured at tip ; legs and toes purplish brown.

106. *GEOSITTA CUNICULARIA.*

Geositta cunicularia Scl. Cat. B. xv. p. 5 ; Arg. Orn. i. p. 165.

a, b. ♂ ♀ ad. Tuyu, Ajó. Nov. 27, 1908.

- c. ♂ ad. Los Ynglases, Ajó. Nov. 24, 1908.
 d, e. ♂ ♀ ad. „ „ Jan. 19, 1909.
 f, g. ♂ ♀ ad. „ „ April 20, 1909.

Irides hazel ; bill dark brown, paler at base of lower mandible ; legs and toes purple-brown.

The November birds are much worn, and the pair taken on the 27th have the wing-feathers and tail almost bleached white. The January birds are moulting.

The Common Miner was usually observed on the banks in pairs, and breeds among the sand-hills, making a hole of about two or three feet deep. In a cavity at the end the eggs are laid on a bedding of dry rubbish, the full clutch being three. There is a clutch of three in Miss Runnacles' collection, taken as late as December 23rd, 1909.

107. FURNARIUS RUFUS.

Furnarius rufus ScL. Cat. B. xv. p. 11 ; Arg. Orn. i. p. 167.

- a. ♂ ad. Los Ynglases, Ajó. Sept. 10, 1908.
 b, c, d, e, f. ♂ ♀ ad. „ „ Oct. 2-12, 1908.
 g, h, i. ♂ ♀ yg. ad. „ „ Nov. 6-4, 1908.
 j, k, l. ♂ ♀ ad. & yg. „ „ Dec. 2-7, 1908.
 m. ♂ ad. „ „ Jan. 25, 1909.
 n. ? young. „ „ Feb. 1, 1909.
 o. ♀ ad. Santa Rosa, Paraguay. Aug. 14, 1909.
 p, q. ♀ ad. Tayru, Paraguay. Aug. 6, 1909.
 r. ♀ ad. Porto Esperança, Brazil. Oct. 13, 1909.
 s. ♀ ad. Colonia Mihanovitch, N. Argentine. Nov. 5, 1909.
 t. ♂ ad. Near Santa Elena, N. Argentine. Nov. 15, 1909.

From September onwards the birds are shewing signs of wear, and the January bird is moulting, the old feathers being much faded, especially those of the tail.

Young birds can be distinguished from the adults by their more rufous dress, and before they wear off by the blackish tips to the throat-feathers.

Ad. Irides hazel ; bill brown, base of lower mandible flesh-colour ; legs and toes sooty brown.

Young. Irides hazel; bill, legs, and toes dull brown; gape yellow.

A common and resident species. The description of its habits given by Mr. Hudson needs little addition.

108. *FURNARIUS ASSIMILIS.*

Furnarius assimilis Scl. Cat. B. xv. p. 14.

a. ♂ ad. Riacho Paraguay, Mirin, Brazil. Oct. 2, 1909.

Irides russet-brown; bill brown, lower mandible paler; legs and toes pale brown.

109. *CINCLODES FUSCUS.*

Cinclodes fuscus Scl. Cat. B. xv. p. 23; Arg. Orn. i. p. 172.

a, b, c, d, e, f, g, h, i. ♂ ♀ ad. Los Ynglases, Ajó. April 14-23, 1909.

Irides dark brown; bill dark brown; gape yellow; legs and toes dark brown.

A winter migrant from the south, arriving in great numbers throughout April, and remaining for the greater part of the winter. Its favourite place is in the roadways, where it sits on the posts or wires of the fencing.

110. *PHLÆOCRYPTES MELANOPS.*

Phlæocryptes melanops Scl. Cat. B. xv. p. 33; Arg. Orn. i. p. 174.

a, b, c. ♂ ♀ ad. Tagana de Milan, Ajó. Nov. 15, 1908.

d, e, f. ♂ ad. & yg. Los Ynglases, Ajó. Dec. 3-7, 1908.

g. ♂ young. " " Feb. 10, 1909.

h. ♂ ad. " " Mar. 11, 1909.

Young ♂. Irides hazel; bill brown, yellow at gape and base of lower mandible; legs and toes ashy.

All the adults are moulting, except one December bird, and all are much worn, except the March bird, which is almost in full feather.

The February young bird has faint blackish tips to the breast-feathers.

A swamp-loving bird, where its peculiar cracking call can be heard: in the Ajó district it is known as the "Hunco cracker."

The nest is a solid structure attached to two or more stems of thick reeds, with entrance at the top side, the hole being protected by an overlapping hood; the nest is lined with feathers, and three eggs appear to be the complete clutch.

111. *LEPTASTHENURA PLATENSIS.*

Leptasthenura agithaloides Scl. Cat. B. xv. p. 35 (part.); Arg. Orn. i. p. 177.

Leptasthenura platensis Sharpe, Hand-l. B. iii. p. 53.

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|----------|--------------------|----------------|
| a. ♂ ad. | Los Ynglases, Ajó. | Oct. 29, 1908. |
| b. ♂ ad. | „ „ | Jan 18, 1909. |
| c. ♀ ad. | „ „ | Feb. 3, 1909. |
| d. ♂ ad. | „ „ | Mar. 12, 1909. |
| e. ♂ ad. | „ „ | Apr. 19, 1909. |
| f. ♂ ad. | „ „ | June 9, 1909. |

Irides hazel; bill blackish, pearly at base of lower mandible; legs and toes olive-green.

The October bird is much worn, and the January, February, and March birds are moulting; the April specimen, except for the tail, being in full feather.

Not a common species in the Ajó district, and frequenting the Tala woods; in habits it much resembles the Tits.

112. *SYNALLAXIS FRONTALIS.*

Synallaxis frontalis Scl. Cat. B. xv. p. 39; Chubb, Ibis, 1910, p. 524 (Paraguay).

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|---------------|------------------------------|-----------------|
| a. ♂ ad. | Villa Oliva, Paraguay. | Aug. 11, 1909. |
| b. ♀ ad. | Puerto Pinasco, „ | Sept. 7, 1909. |
| c. ♂ ad. | Pan de Azucar, Brazil. | Sept. 20, 1909. |
| d, e. ♂ ♀ ad. | Near Villa Franca, Paraguay. | Nov. 6, 1909. |

Irides amber; bill slate-coloured, upper mandible darker; legs and toes dark olive-green.

All the specimens are shewing signs of wear, especially the November birds. The female taken in November was sitting.

Commonly observed throughout Paraguay and in all the open country, where it frequents the long grass.

113. *SYNALLAXIS CINNAMOMEA*.

Synallaxis cinnamomea Scl. Cat. B. xv. p. 50.

Synallaxis cinnamomea russeola Chubb, Ibis, 1910, p. 526 (Paraguay).

a. ♂ ad. Colonia Risso, Paraguay. Sept. 8, 1909.

Irides pale brown; bill, upper mandible dark brown, lower livid; legs and toes brown.

114. *SYNALLAXIS VULPINA*.

Synallaxis vulpina Scl. Cat. B. xv. p. 52; Sharpe, Hand-l. B. iii. p. 56.

a. ♂ ad. Opposite Rabicho, Brazil. Oct. 10, 1909.

115. *SYNALLAXIS PHRYGANOPHILA*.

Synallaxis phryganophila Scl. Cat. B. xv. p. 57; Arg. Orn. i. p. 181; Chubb, Ibis, 1910, p. 526.

a, b. ♂ ♀ ad. Villa Oliva, Paraguay. Aug. 11, 1909.

c. ♂ ad. Colonia Mihanovitch, N. Argentine. Aug. 12, 1909.

d. ♀ ad. Cabo Emma, Paraguay. Oct. 20, 1909.

e. ♀ ad. Puerto Maria, ,, Oct. 24, 1909.

Irides red-brown; bill, legs, and toes slate-coloured.

The females have considerably shorter tails than the males, and the October birds are much worn; that taken on the 24th was laying.

Also commonly observed throughout the river expedition, frequenting the same kind of country as *S. frontalis*.

116. *SIPTORNIS SORDIDA*.

Siptornis sordida Scl. Cat. B. xv. p. 68; Arg. Orn. i. p. 184.

a. ♀ ad. Villa Oliva, Paraguay. Aug. 11, 1909.

Irides brown; bill, upper mandible dark, lower light brown; legs and toes purplish brown.

117. SIPTORNIS SULPHURIFERA.

Siptornis sulphurifera Scl. Cat. B. xv. p. 69.

Synallaxis sulphurifera Arg. Orn. i. p. 185.

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|---------------------|--------------------|-------------------|
| a. ♀ ad. | Los Ynglases, Ajó. | Dec. 27, 1908. |
| b, c. ♂? ad. & juv. | „ „ | Jan. 4, 1909. |
| d. ? juv. | „ „ | Feb. 7, 1909. |
| e. ♀ juv. | „ „ | Mar. 13, 1909. |
| f, g. ♂ ♀ young. | „ „ | Feb. 3, 14, 1910. |

Ad. Irides pale brown; bill horn-coloured, base of lower mandible flesh-coloured; legs and toes purplish brown.

Young. Irides very pale brown; bill horn-coloured, base of lower mandible and gape yellow; legs and toes darkish purplish brown.

Both the adults are much worn, the male having been taken with the nest and eggs.

The young birds differ from the adults as follows:—
“Above fawn-brown; forehead and superciliaries dark buff; ear-coverts, cheeks, and whole under side bright buff, with no sulphur-yellow spot in the middle of the throat.”

A fairly common species, which frequents the cañadons, where it also breeds, the nest being a dome-shaped structure of dry grass with the entrance-hole at the side, suspended in the thick grass or rushes; three eggs apparently make the complete clutch.

118. SIPTORNIS HUDSONI.

Siptornis hudsoni Scl. Cat. B. xv. p. 70; Arg. Orn. i. p. 186.

- | | | |
|------------------|--------------------|-------------------|
| a, b, c. ♂ ♀ ad. | Los Ynglases, Ajó. | Nov. 10–30, 1908. |
| d, e. ♂ young. | „ „ | Dec. 1, 1908. |
| f, g. ♂ ad. | Cape San Antonio. | Dec. 17–21, 1908. |
| h. ♀ ad. | Los Ynglases, Ajó. | Jan. 21, 1909. |
| i, j. ♂ ♀ ad. | „ „ | Feb. 4, 1909. |
| k. ♂ young. | „ „ | Mar. 21, 1909. |

Young. Irides hazel; bill horn-coloured, yellow at gape; legs and toes ashy flesh-coloured.

The December adults are worn and have almost lost the

ashy edges to the feathers, and the February birds are moulting.

The young in December were taken from the nest.

The throat-patch varies from pale sulphur-yellow to deep cinnamon; in most specimens each feather has a black centre at the tip, in others this is entirely wanting.

The young bird taken in March is fully fledged, and differs from the adults as follows:—

“Margins of back and wing-feathers much broader than in the adult and more buffy; gular patch faint; throat and neck finely speckled; breast and flanks with broad black centres to each feather.”

A common species which frequents the open grass country, where it is skulking in habits and reluctantly takes to flight.

The nest is difficult to find, owing to the bird sneaking off and hiding in the grass; it is placed on the ground in thick grass and is a dome-shaped structure of dead grass, lined with feathers.

In both nests that I secured there were eggs of *Molothrus bonariensis*.

119. SIPTORNIS MALUROIDES.

Siptornis maluroides Scl. Cat. B. xv. p. 72; Arg. Orn. i. p. 188.

a. ♀ ad.	Cape San Antonio.	Dec. 17, 1908.
b. ♀ young.	Luiconia, Ajó.	Jan. 8, 1909.
c. ? young.	Los Ynglases, Ajó.	Jan. 6, 1909.
d, e. ♂ ad. & yg.	„ „	Feb. 7, 1909.
f, g. ♂ ad. & yg.	„ „	Feb. 10, 1910.

Irides very pale yellow; bill, upper mandible dark, lower pale horn-coloured; legs and toes pale horn-coloured.

The adult of February 1909 is moulting.

The young birds differ from the adults as follows:—

“Forehead and middle of crown fulvous brown, slightly striated with blackish; beneath pale buff, striations on flanks less distinct than in the adult and the black specklings of the throat and chest more numerous.”

The young bird taken on February 10 is moulting very slightly and has one chestnut feather in the head.

This Spine-tail frequents the rushes and reeds, where it creeps about after the manner of a Sedge-Warbler, and is not, as a rule, easy to shoot.

I took three eggs at Ajó: the nest, a mere bedding of dead grass, being placed on the ground in a dry part of the swamp.

120. *ANUMBIUS ACUTICAUDATUS*.

Anumbius acuticaudatus Scl. Cat. B. xv. p. 75 ; Arg. Orn. i. p. 189.

a, b. ♂ ♀ ad. Los Ynglases, Ajó. Sept. 12–Oct. 28, 1908.

c, d, e. ♂ ♀ ad. & young. Los Ynglases, Ajó. Jan. 25–Mar. 23, 1909.

Irides hazel ; bill pale brown ; legs and toes pale yellowish livid.

Both the September and October birds are worn and faded.

The February and March birds are in moult, the latter having almost completed it.

The young bird is very similar to the adult, but is paler generally, especially below, and has much less chestnut on the forehead.

This is a common resident in the Ajó district, and spends more of its time on the ground than in the trees. It has a clear and trilling note.

The nest is a large structure of sticks, generally thorny, placed in a tree or bush, the hole being at the top, whence a zigzag tunnel leads down to the nest ; it is warmly lined, often along the whole length of the tunnel also, with wool.

121. *PHACELODOMUS RUFIFRONS*.

Phacelodomus rufifrons Scl. Cat. B. xv. p. 80.

Phacelodomus frontalis Arg. Orn. i. p. 192.

a, b. ♂ ♀ ad. Puerto Maria, Paraguay. Oct. 24, 1909.

Irides dark grey ; bill dark slate-coloured, lower mandible ashy ; legs and toes slate-coloured.

This pair had a nest of sticks at the top of a palm-tree, and were, I believe, sitting, though I was unable to get up to the nest.

122. *PHACELODOMUS STRIATICOLLIS.*

Phacelodomus striaticollis Scl. Cat. B. xv. p. 82; Arg. Orn. i. p. 194.

a, b, c. ♂ ♀ ad. & young. Cape San Antonio. Dec. 18-19, 1908.

d. ♀ young. Los Ynglases, Ajó. Jan. 5, 1910.

Both the adults are much worn, and the female has a tinge of chestnut on the back.

“Irides bright yellow; bill, legs, and toes pale slate-coloured, upper mandible darker.”

The young are similar, excepting that the December bird has a paler throat, is brighter on the breast and flanks, and has a darker bill. They differ from the adults as follows:—

“Above dull russet-brown, crown dull chestnut; beneath pale creamy white, breast and flanks slightly washed with reddish brown; edges of secondaries russet-brown.

“Irides dark blue-grey; bill dark horn-coloured, greater part of lower mandible and gape pale yellow; legs and toes ashy.”

A fairly common species which inhabits rough grasslands and the cañadons; it has a whistling call.

The nest is usually placed in a low solitary tree or shrub, and is a longish structure of sticks placed almost horizontally, the entrance being at the higher end with a tunnel communicating with the nesting cavity; it is lined with wool and hair.

123. *PHACELODOMUS RUBER.*

Phacelodomus rufipennis Scl. Cat. B. xv. p. 83, pl. v.

Phacelodomus ruber Chubb, Ibis, 1910, p. 528 (Paraguay).

a, b. ♂ ♀ ad. Colonia Mihanovitch, N. Argentine. Aug. 12, 1909.

c, d. ♂ ♀ ad. Colonia Mihanovitch, N. Argentine. Nov. 5, 1909.

e. ♀ ad. Bella Vista, N. Argentine. Nov. 12, 1909.

The November specimens are very much worn and that from Bella Vista has started its moult.

Many individuals of this Thorn-bird were observed at Colonia Mihanovitch and several nests were examined, but none contained eggs, though the female shot on the 5th of November was laying.

The nest is a fair-sized structure of sticks suspended from the overhanging branches of a tree, the entrance being from below and the nesting-chamber near the top.

124. HOMORUS CRISTATUS.

Homorus cristatus Scl. Cat. B. xv. p. 86.

Pseudosizura cristata Sharpe, Hand-l. B. iii. p. 65 (1901).

a. ♂ ad. Pasage de Bagre, Brazil. Sept. 29, 1909.

Irides pale yellow; bill blue-slate-coloured; legs and toes olive-green.

125. SITTASOMUS CHAPADENSIS.

Sittasomus chapadensis Ridgw. Pr. U.S. Nat. Mus. xiv. p. 509.

a. ? ad. Riacho Ancho, N. Argentine. July 30, 1909.

b. ♂ ad. Pan de Azucar, Brazil. Sept. 20, 1909.

Irides brown; bill, legs, and toes slate-coloured.

126. XIPHOCOLAPTES MAJOR.

Xiphocolaptes major Scl. Cat. B. xv. p. 145; Arg. Orn. i. p. 201; Chubb, Ibis, 1910, p. 532 (Paraguay).

a. ♂ ad. Puerto San Juan, Paraguay. Aug. 26, 1909.

b. ♀ ad. Near Villa Pilar, Paraguay. Nov. 7, 1909.

Irides rich red-brown; bill pearly slate-coloured; legs and toes dark olive-green.

The female is of a brighter colour on the head than the male, and was laying.

127. PICOLAPTES ANGUSTIROSTRIS.

Picolaptes angustirostris Scl. Cat. B. xv. p. 155; Arg. Orn. i. p. 201; Chubb, Ibis, 1910, p. 534 (Paraguay).

a. ♀ ad. Riacho Ancho, N. Argentine. Aug. 1, 1909.

b. ♂ ad. Tayru, Paraguay. Aug. 6, 1909.

c. ♀ ad. Desaguadero, Paraguay. Aug. 29, 1909.

d. ♀ ad. Sapatero Cué, Paraguay. Sept. 3, 1909.

e. ♂ ad. Colonia Mihanovitch, N. Argentine. Nov. 5, 1909.

f. ♂ ad. Near Santa Elena, N. Argentine. Nov. 15, 1909.
Irides hazel; bill fleshy brown; legs and toes purple.

These specimens vary slightly, some being paler and others darker. None shew much signs of wear, and that shot on the 15th of November is in perfect plumage, but is apparently not young.

The males have rather shorter bills than the females.

Numbers of this bird were seen: they had much the habits and actions of Tree-creepers (*Certhia*). The call is loud.

128. PICOLAPTES BIVITTATUS.

Picolaptes bivittatus Scl. Cat. B. xv. p. 155.

a. ♂ ad. Riacho Paraguay, Brazil. Oct. 3, 1909.

129. XIPHORHYNCHUS TROCHILIROSTRIS.

Xiphorhynchus trochilirostris Scl. Cat. B. xv. p. 159.

a. ♂ ad. Riacho Paraguay, Brazil. Oct. 3, 1909.

b. ♂ ad. Opposite Rabicho, Brazil. Oct. 10, 1909.

Irides hazel; bill pale brown; legs and toes olive-green.

130. DENDROCOLAPTES PICUMNUS.

Dendrocolaptes picumnus Scl. Cat. B. xv. p. 170; Chubb, Ibis, 1910, p. 534.

a. ♂ ad. Mortero, Paraguay. Aug. 13, 1909.

Irides hazel, eyelid yellow; bill dark brown, gape yellow; legs and toes greenish ash.

131. THAMNOPHILUS MAJOR.

Thamnophilus major Scl. Cat. B. xv. p. 186; Arg. Orn. i. p. 203.

a. ♂ ad. Riacho Ancho, N. Argentine. July 30, 1909.

b. ♂ ad. Desaguadero, Paraguay. Aug. 29, 1909.

c. ♂ ad. 10 miles above Villa Pilar, Paraguay. Aug. 7, 1909.

d. ♀ ad. 10 miles below Boca de Homiguera, Brazil. Oct. 12, 1909.

e. ♂ ad. Curuzu Chica, Paraguay. Oct. 29, 1909.

f. ♂ ad. Near Goya, N. Argentine. Nov. 13, 1909.

♂. Irides red; bill slate-coloured, black at tip; legs and toes slate-coloured.

♀. Irides deep rich orange; bill, legs, and toes slate-coloured.

Commonly observed, frequenting the low scrub and undergrowth in the forests and the edges of the swamps.

132. *THAMNOPHILUS CÆRULESCENS.*

Thamnophilus caerulescens Scl. Cat. B. xv. p. 200; Arg. Orn. i. p. 204.

a. ♂ ad. Arjerichi, Paraguay. Aug. 9, 1909.

Irides hazel; bill, upper mandible black, lower slaty; legs and toes slaty.

Call a loud and clear "qua qua."

133. *THAMNOPHILUS RADIATUS.*

Thamnophilus radiatus Scl. Cat. B. xv. p. 210; Chubb, Ibis, 1910, p. 520 (Paraguay).

a, b. ♂ ♀ ad. Boca de Homiguera, Brazil. Oct. 9, 1909.

c. ♂ ad. Cabo Emma, Paraguay. Oct. 20, 1909.

♂ ♀. Irides yellow; bill, legs, and toes blue-slaty, culmen black.

134. *FORMICIVORA RUF A.*

Formicivora rufatra Scl. Cat. B. xv. p. 250.

Formicivora rufa Allen, Bull. Amer. Mus. ii. p. 253 (1889); Sharpe, Hand-l. B. iii. p. 25.

a. ♀ ad. Albuquerque, Brazil. Oct. 1, 1909.

Irides hazel; bill, legs, and toes blue-slaty.

135. *CERCOMACRA MELANARIA.*

Cercomacra melanaria Scl. Cat. B. xv. p. 268.

a, b. ♂ ♀ imm. & ad. Albuquerque, Brazil. Oct. 1, 1909.

c. ♂ imm. Rabicho, Brazil. Oct. 8, 1909.

d. ♂ ad. Boca de Homiguera, Brazil. Oct. 9, 1909.

e, f. ♂ ♀ ad. 10 miles below Boca de Homiguera, Brazil.
Oct. 12, 1909.

♂. Irides grey-brown; bill black; legs and toes slate-coloured.

♀. Bill slate-coloured; otherwise as male.

The young males are moulting from the grey plumage to the black.

Very few examples of this bird were seen: it was observed frequenting the thick undergrowth along the river-bank and was very tame.

[To be continued.]

IV.—*On the Birds of the Cayman Islands, West Indies.*

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(Text-figure 7.)

(i.) *Introductory Remarks.*

IN the following paper I have endeavoured to compile a list of the Birds of the Cayman Islands on the lines of the "Revised List of the Birds of Jamaica," by Dr. P. L. Sclater, which was published in the 'Handbook of Jamaica' for 1910.

The Cayman Islands (see text-fig. 7, p. 138), which form a political dependency of Jamaica, are situated in the western end of the Caribbean Sea, between the meridians of $79^{\circ} 44'$ and $81^{\circ} 26'$ W., and the parallels of $19^{\circ} 49'$ and $19^{\circ} 46'$ N. They consist of three islands — Grand Cayman, Little Cayman, and Cayman Brac.

The island of Grand Cayman is seventeen miles in length and between four and seven miles in width.

Little Cayman and Cayman Brac are each about nine miles long by one and a half wide. They lie about six miles apart. The west end of Little Cayman is some sixty miles